Croonian Lectures
ON
POINTS CONNECTED WITH DIABETES.

Delivered at the Royal College of Physicians,

BY F. W. PAVY, M.D., F.R.S.

LECTURE II.—PART I.

THE process of analysis which has been adopted by Bernard differs, as I have mentioned, in principle of action from that customarily put into operation, the reduced oxide of copper being kept in solution by the influence of a great excess of potash on the organic matter present, instead of being allowed to be thrown down. I have tried the process against the precipitation of the suboxide and the estimation by weight of the copper in a manner I shall afterwards describe. The two processes give very discordant results, as will be seen from the table to which I will direct your attention.

Comparison of Bernard's Volumetric with Pavy's Gravimetric Process of Analysis.

Blood.			Sugar per 1000 parts.			
			Pavy's gravimetric process.		Bernard's volumetric process.	
				Mean.		Mean.
I. From bullock slaughtered by Jewish method.			(a) ·589 (b) ·588	·588	·975	
II. Ditto	ditto	ditto	(a) ·510 (b) ·489	·499	(a) ·609 (b) ·640	·624
III. Ditto	ditto	ditto	(a) ·515 (b) ·535	·525	1·025	
IV. Ditto	ditto	ditto	(a) ·698 (b) ·709	·703	·869	
V. From bullock slaughtered by poleaxe.			(a) 1·091 (b) 1·097	1·094	(a) 1·311 (b) 1·403	1·357
VI. From dog			(a) ·795 (b) ·801	·803	·800	
VII. From sheep			(a) ·509 (b) ·526	·517	·761	
VIII. From case of severe diabetes (obtained by cupping).			(a) 4·990 (b) 4·951	4·970	(a) 5·000 (b) 4·705	4·852

In each case my own process was checked by taking two samples of the blood for analysis. The same was also done in three instances with Bernard's volumetric process.

On looking at the figures, it is evident that there must be something radically wrong either with Bernard's process or that dependent for action on the precipitation of the suboxide. One or other it is quite certain must be seriously faulty. Let us stop and subject Bernard's process to the test of experimental examination before I proceed further in the matter.

In a communication read at the Royal Society in June last, I referred to the danger of relying upon results where the influence of organic matter and a large excess of potash was brought into play in the analysis. I then merely pointed this out and urged it upon argumentative grounds. I was not aware at the time that the danger suggested could so easily be shown to have a real existence. Lately, however, I have learnt that, I think I may go so far as to say, a demonstration can be afforded that the potash and organic matter lead to the development of a reducing substance, which, without the presence of sugar, produces a decolorisation of the test. I do not ask you simply to take my word upon this matter. I will proceed to render the truth of the assertion evident to you.

I have here a liquid which has been prepared from dog's blood in the ordinary way with the use of sulphate of soda. This blood to start with only contained a small amount of sugar, and had been kept for two days. Besides this, whatever sugar may chance to have been present has been destroyed by boiling with a little potash. It is a well-known property of grape-sugar that it is easily destroyed by boiling for some time with a caustic alkali. I may show this action by applying the copper test to the contents of these two tubes. In the one case we have a solution of grape-sugar, and in the other this same solution, after having been boiled with a small quantity of potash. The one gives a copious precipitate of reduced oxide, the other undergoes no change. I may assume that there is no sugar in this liquid which has been obtained from the blood, but I will test it in the ordinary way with the copper liquid, and it will be seen that a verification is afforded by an entire absence of reaction. I will now apply Bernard's method of using the copper test. 1 cc. of Fehling's solution has been placed in this flask, with 25 cc. of a concentrated solution of potash. The contents of the flask are brought to the boiling point, and the prepared liquid from the blood dropped in. The blue colour soon begins to fade, and now complete decolorisation has occurred. Here we have a result upon which the quantitative estimation of sugar has been founded without any sugar present to produce it.

Shortly after my communication was published in the Proceedings of the Royal Society, a criticism appeared from the pens of MM. Vidau, Dastré, and d'Arsonval in the *Gazette Hebdomadaire* and *Progrès Médical* of Paris. As the last authority signs himself "Préparateur au Collége de France," I imagine that what he says may be taken as agreeing with, if not directly inspired by, Bernard's views. I will take no notice of the show of personality which pervades a portion of the criticism, but feel it incumbent upon me to deal with that which immediately concerns the point before us.

I am accused of not having rightly comprehended the nature of the process I have criticised. I must throw this accusation back upon my critics. The true principle of action of the process appears to have escaped their recognition. It does not seem to have occurred to them that the reason of the suboxide of copper remaining dissolved is attributable to ammonia. Dr. d'Arsonval speaks of the organic matter which escapes coagulation in the preparation of the blood for analysis being instrumental, in the presence of the alkali, in maintaining the suboxide dissolved. The organic matter is necessary, but the observations I have made I consider justify my saying that it is *not as organic matter that it acts upon the suboxide, but as a source of ammonia, which is the real solvent principle.* Chemists are well acquainted with this action of ammonia, but I do not find anything said in chemical works about a solvent influence being exerted over the suboxide of copper by organic matter in the presence of an alkali, as we know to occur, at least through the influence of certain forms of organic matter, in the case of the oxide.

M. Vidau records an experiment which he adduces as showing that a fresh concentrated solution of potash acts as a solvent of the suboxide of copper. He says if a dilute solution of honey be dropped into Bernard's test (1 cc. of Fehling's solution, 10 grammes of caustic potash, and 20 cc. of distilled water), instead of the ordinary reaction, attended with red precipitation, being perceived, the suboxide remains dissolved, and a colourless liquid is produced. M. Vidau here takes a form of sugar which is mixed with extraneous organic matter, and it is through the influence of this extraneous organic matter that the result he describes is obtained. If he will proceed further with his observations he will find that with *pure* sugar no such result occurs. If, for instance, some of the ordinary purified cane (loaf) sugar be transformed into inverted sugar by boiling with a mineral acid, and this be used, an instantaneous precipitation of the suboxide is seen. In the case of commercial grape sugar there is sufficient nitrogenous impurity present to delay for a moment precipitation, but it then occurs, whilst in the case of honey a still further delay is noticed; but only this, for precipitation here also soon occurs—that is, when the ammonia which the nitrogenous impurity can generate through the influence of the concentrated boiling solution of potash has been dissipated.

Thus the small quantity of extraneous matter existing in honey has been a source of deception to M. Vidau, and led him to commit himself to an assertion which proves to be untrue.

At the risk of wearying you I am obliged to enter into these chemical details. It is of vital importance that we should know the real value to be given to a process which has been advanced by so great an authority as Bernard for supplying information which stands at the basis of the question before us. I have spoken of the principle of action of Bernard's new application of the copper test; I have suggested that it is not through organic matter as such, but through the influence of ammonia, developed by the effect of

the concentrated solution of potash upon it, that the special result noticeable is produced. Any source of ammonia will answer the same purpose, and give rise to identically the same issue. A salt of ammonia—for instance, the chloride of ammonium,—or a simple organic product like urea, which is susceptible of conversion purely into carbonate of ammonia, added to a saccharine solution, will lead to decolorisation, with non-precipitation, in contact with Bernard's test. Let me now proceed to show what is to be said in answer to Dr. d'Arsonval upon the question of the validity of the test in relation to the quantitative determination of sugar.

Dr. d'Arsonval boldly and plainly advances the proposition that "for the method to be free from error it is necessary—first, that the decolorisation should be due to sugar; secondly, that it should be due to sugar only." He continues: "A very simple experiment shows that this is the case. First, leave some blood in a vessel for thirty-six or forty-eight hours; at the end of this time all the sugar is destroyed. The liquid derived from its treatment with the sulphate of soda does not decolorise the smallest trace ('le plus petit atome') of blue liquid. Secondly, add to another portion of the same blood a minute quantity of glucose; treat it like the first; it decolorises the blue liquid. Add known quantities of glucose; you will always find them to the extent of nearly a hundredth." Dr. d'Arsonval sums up: "The sugar is truly then the only decolorising agent." And afterwards, when speaking of the reason of the suboxide remaining dissolved, he says that it is owing to the presence of the small quantity of organic matter which has escaped the coagulating action of the treatment with sulphate of soda, and that this organic matter is *itself* altogether devoid of action upon the blue liquid.

It is totally incomprehensible to me how such assertions as these could have been made. They are diametrically opposed to the results obtained in my own laboratory in connexion with the blood and to the collateral evidence that will be adduced when I come later on to speak of the liver. I have already given an ocular illustration relative to dog's blood that had been kept for forty-eight hours. The product, even after being boiled for some time with a solution of potash for the purpose of adding force to the experiment, neatly and completely decolorised Bernard's test.

Here are other examples from recent observation affording similar and still more striking testimony.

A specimen of bullock's blood after slaughtering by the poleaxe was analysed at once, and found to indicate, according to Bernard's process, the presence of 1·059 per 1000, and, according to my own gravimetric process, 0·840 per 1000 of sugar. It was allowed to stand in the laboratory, and on the fourth day was subjected to examination. Bernard's process of preparation, as described by Dr. d'Arsonval, was strictly followed—that is to say, equal weights of blood and of sulphate of soda were taken, and after coagulation by heat the loss by evaporation was restored by the addition of distilled water. 1 cc. of Fehling's solution with 20 cc. of a concentrated solution of potash was decolorised by 8·1 cc. of the product, which, according to the correct formula for calculation taken from the confused expressions of it given by Bernard, Dastré, and d'Arsonval, is equivalent to an indication of ·987 per 1000 of sugar. On the fifth day 9·9 cc. were required to decolorise, representing ·808 per 1000 of sugar. On the ninth day the blood smelt strongly of putrefaction. Decolorisation was in great part, though not completely, effected by 36·2 cc. of the product, which was all that had been obtained, as filtration only without compression of the coagulum had been performed.

A companion observation was made on a specimen of sheep's blood obtained on the same day, and afterwards allowed to stand by the side of the other.

On the first day Bernard's process indicated 0·904 and my own 0·454 per 1000 of sugar. On the fourth day Bernard's test was decolorised by 25·2 cc. of the liquid yielded by the blood, which affords an indication of ·317 per 1000 of sugar. On the fifth day the quantity required to decolorise was 26·4 cc., representative of ·303 per 1000 of sugar; and on the ninth day, when the blood smelt strongly of putrefaction, 28·2 cc. completely decolorised. Although in this state of putrefaction, if the indication of the test were relied upon, it would have to be said that the blood contained ·285 per 1000 of sugar.

In another similarly conducted experiment a specimen of bullock's blood, examined immediately, indicated by my own process the presence of 0·804 per 1000 of sugar. By Bernard's process the 1 cc. of Fehling's solution was decolorised by 5 cc. of the product, which represents 1·000 per 1000 of sugar. On the following day the blood, tested ordinarily, gave no reaction of sugar, but by Bernard's test 6·1 cc. = 1·311 per 1000 of sugar, decolorised. On the 3rd day 9·8 c.c. = 0·810 per 1000 of sugar, and on the fifth day, when there was a decided smell of decomposition, 10·8 cc. = 0·740 per 1000 of sugar, decolorised.

The specimen of sheep's blood obtained at the same time contained, according to my own process, 0·538 per 1000 of sugar; by Bernard's process 8·9 cc., equivalent to 0·898 per 1000 of sugar decolorised. On the second day the blood was tested ordinarily, and gave no reaction, but 9·4 cc. = 0·851 per 1000 of sugar, decolorised. On the third day 21·3 cc. = 0·375 per 1000 of sugar, and on the fifth day, when there was decided evidence of incipient decomposition, 25 cc. = 0·320 per 1000 of sugar, decolorised.

Looking at these results, it will not be wondered at that I should speak of d'Arsonval's assertion as perfectly incomprehensible to me. In each case, by decolorisation is meant that the contents of the flask were brought to as colourless a state as clear water; and to render it incontestable that the result was due to reduction, a few drops of peroxide of hydrogen were upon several occasions added, with the effect of immediately restoring the blue colour by re-oxidation.

In these last experiments an exact comparison is afforded between the amount of sugar indicated by Bernard's and my own gravimetric process. In the first set of experiments showing the comparison, which I represented in a tabular form, the figures derived from the application of Bernard's process are a little higher than they should be on account of the omission, from the cause I have already explained, to replace the loss by evaporation during the preparation of the blood for analysis by distilled water.

From what I have adduced, the inference to be drawn appears to me to be that the concentrated solution of potash, forming a part of Bernard's test, leads to the splitting up of some kind of nitrogenous principle or principles present into ammonia and a reducing substance. These two factors—ammonia and the reducing substance—it may, I consider, be said, are necessary for the decolorising effect, and it would seem that the two may be developed under the influence of the potash, and give a certain amount of the reaction which has been attributed by Bernard as due to sugar.

Lumleian Lectures
ON
INSANITY IN ITS LEGAL RELATIONS.

Delivered at the Royal College of Physicians,

BY JOHN CHARLES BUCKNILL, M.D., F.R.S.

LECTURE II.—PART I.

THE exigencies of affairs compelled the lawyers themselves to construct one of the earliest classifications of insanity—namely, that well-known one of Lord Coke, who divided insane persons into—(1st) idiots from birth; (2nd) the accidentally insane who have wholly lost memory and understanding; (3rd) those who have lucid intervals; and (4th) those who deprive themselves of understanding by vicious actions, as drunkards;—by no means a comprehensive or useful classification, but interesting as showing the need which was felt of referring individual instances to generalised notions. We need not delay to criticise the demerits of this ancient scheme. Like all kinds of insanity which have any interest for lawyers, it is based upon mental qualities and conditions, and not upon the physical substratum. It is this point which, more than any other, we are bound always to bear in mind in the consideration of the diagnosis of insanity for legal purposes. When we reflect upon the nature of inquiries in courts of law in which the diagnosis of insanity is involved, we are bound to acknowledge that they refer entirely, not to the existence of bodily disease which is the cause of insanity, but to the product of that disease, which may to a great extent be considered by itself and apart from its origin.

In the debate in the House of Lords on the Lunacy Regulation Bill of 1862, Lord Chancellor Westbury went far beyond this position in his statement "that the introduction of medical opinions and medical theories upon this subject has proceeded upon the vicious principle of considering insanity as a disease"; whereas the law regards it as a fact which can "be ascertained in like manner as any other fact." And upon this text he founded a great disparagement of medical witnesses. The error into which he himself seems to have fallen was in stating that, according to medical opinions and theories, insanity is a disease; whereas no thoughtful medical man would be capable of maintaining so absurd an opinion. None of us dream of maintaining that insanity is a disease. We do, indeed, consider it the result of diseased conditions, and as no other than such result; and while we admit that insanity, as a mental fact, is the only proper subject of legal inquiry, and also that in many instances of legal inquiry there is no need to trace such fact to its cause—as, for instance, in a case of insanity where the obvious state of a man's mind affords ample evidence of the fact,—yet in other instances, and those of the most difficult and intricate legal inquiry, it is impossible to omit the consideration of the origin and causation of the fact, whether it be pathological or not. And if it has been shown that a diseased condition of the body is in so great a number of instances proved to be the cause and condition of the fact of insanity, that all men who have carefully studied the matter believe that the connexion always exists, then it must of necessity follow that the fact of insanity cannot be considered without reference, tacit or expressed, to the fact of bodily disease which underlies it. And it has come to this pass, that these are not the opinions and theories of medical men alone, proceeding upon a vicious principle, but the opinions of lawyers themselves, with the Lord Chief Justice of England at their head, expressing it without reserve. And of almost greater importance, they are the opinions of the public, and, therefore, of the jurymen, so that they are established beyond the power of debate to disturb. We need not, therefore, concern ourselves very seriously about Lord Westbury's attempt to oust medical witnesses from the witness-box in lunacy inquisitions, nor about Lord Moncrieff's charges, who, following in the same track, showed an inclination to do the same for medical witnesses in criminal trials when lunacy is pleaded, and the fallacy of whose argument I have elsewhere exposed. We are bound, however, to accept whatever instance may be found in the arguments of these eminent lawyers, however erroneous their conclusions may be; and this I take to be their earnest and emphatic declaration that the object of the lawyer's pursuit in every concrete instance is the mental fact of insanity, and not that of disease; and from this we must further conclude that in the pursuit of this object any generalisations for practical purposes must be generalisations of instances which resemble each other in the kind of insanity, and not generalisations which resemble each other in the kind of disease. Whenever the kind of insanity can be shown to correspond to the kind of disease we have a perfect generalisation, and we may well believe that this correspondence always does exist; but, unfortunately, in a large proportion of instances our actual knowledge halts lamentably in the rear of our scientific foresight, and it is knowledge alone which is, or ought to be, accepted as evidence in judicial investigations.

It is towards the enlightenment of this darkness that we, as men have science, have to strive, and if we, or those who take up the task from our failing hands, be successful upon this result, we may be sure that when each concrete fact of insanity can be referred to and connected with a corresponding fact of disease, no precedent nor argument will be able to prevent civilised communities from requiring its judicial officers to accept proof of the particular disease as evidence of the fact of insanity. Our task at present is, with untiring patience and undaunted resolution, to search for and accumulate the knowledge which will enable us to build the edifice of our science of mental pathology, of which the foundations are assuredly already laid. To what extent the science will eventually be perfected one may well decline to surmise, but when we compare the past with the present condition of our knowledge in the two elements of the science we may well be hopeful, if not confident. When we think of Lord Coke's rudimentary classification of insane persons, and remember that even Pinel did not distinguish the mental defects of the dement from those of the idiot, the mind in wreck and decay from the mind abortive; and when, on the other side, we reflect that within the present century the physiology of the nervous system has been discovered so far as it is known, from Charles Bell and Prochaska to our own Ferrier, what grounds have we to think so despairingly of our successors as to doubt that they will carry forward with unflagging persistence a branch of science which appeals more strongly than any other to man's curiosity about himself, and involves his dearest and weightiest interests? In other investigations as to changes of force by diseased conditions—for instance, as to variations of temperature caused by fever,—the change of force is only important as an indication of variations in its cause. But in changes of mind-force the change in the force itself is of primary importance; and not only so, but it most insists upon our attention, the result of diseased change in this case being obvious, while the physical substratum is oftentimes most obscure. On these two accounts it has occurred that even physicians, and for medical purposes, have been in the habit of inverting their customary method of investigations in regard to diseases causing insanity, and of classifying the phenomena rather than the reality, and it still must be so for a time, for in all but rare cases the reality remains doubtful. Therefore, physicians still continue to classify the insane as maniacs, monomaniacs, melancholics, demente, &c.—terms originally technical, but which have now worn for themselves a use and a place in common language, terms therefore with which it would now be exceedingly inconvenient to dispense, although they may not connote things with scientific accuracy. And it is to be remarked that all such terms are redolent of derangement of the mental force—that is to say, of insanity from the lawyer's point of view, and that they in no wise denote diseased conditions of the physical substratum.

And if this can be said of these technico-popular terms, how much more completely will the distinction apply to that more recent nomenclature of mental derangement which physicians have introduced for the instruction perhaps, but certainly not to the contentment, of our legal friends: Homicidal insanity, suicidal insanity, instinctive insanity, impulsive insanity, with their Latin compeers, kleptomania, pyromania, erotomania, and oinomania, to connote the ideas that theft, fire-raising, lust, and drunkenness are the results of madness.

The most important of these forms for our present purpose is homicidal insanity, or, as it is more frequently expressed in the recent works of English authors, impulsive insanity to kill. Not that any of them is devoid of a reflected importance, seeing that the argument is urged with pertinacity that the proof of one of these states carries with it the proof of the whole of them. Although I am prepared to deny the truth of the theory in all its ramifications, time will only permit me to discuss it with reference to its crowning point of mischief if it be untrue—namely, in its application to excuse the guilt of murder. Our colleagues and countrymen have adopted the theory of impulsive insanity from the distinguished French physicians who flourished early in this century, and especially from Esquirol, Georget, and Marc, but I do not remember to have seen it remarked that the latter derived their inspiration from an earlier, and still more celebrated writer—namely, from the founder of phrenology. It seemed strange that although the first instances of *monomanie homicide sans délire* of the French authors are quoted from Gall, no credit for the idea was ever given to him; but a reference to Gall's great work "Sur les Fonctions du Cerveau," affords some explanation. In this treatise, replete with learning, full of common sense, and only spoiled by the dogmatism of cranioscopy, he indicates clearly the natural growth of "the impulse to kill, with enfeeblement of the moral liberty. There is," he says, "in man an inclination which advances by degrees, from a simple indifference to witness the sufferings of animals, and a pleasure in seeing death inflicted, even up to the most imperious desire to kill. Sensibility may reject this doctrine, but it is only too true. Whosoever wishes to form a right judgment of the phenomena of nature, ought to have the courage to recognise things as they exist, and in general not to make man out better than he is. There are," he adds, "both among adults and children, both among common and cultivated men, some who are sensitive, and some who are indifferent, to the sufferings of others. Some feel pleasure in torturing and killing animals, without our being able to attribute it either to education or to habit," and he cites instances in which men had become butchers, and even executioners, to gratify this inclination, and a number of other horrid in-

stances less within the sufferance of the law. The most remarkable of these is that of M. le Duc de Bourbon Condé, Comte de Carolais, who tortured animals, exercised atrocious barbarities upon women, committed many murders without interest, without vengeance, without anger; and who even shot men while roofing houses, for the barbarous pleasure of seeing them fall. This case has been repeatedly quoted from Gall, as an instance of homicidal insanity, or of moral insanity; but although he admits that this "detestable inclination may always be derived from a vice in the organisation," he adds—and here is the great difference between him and his French disciples, which they pass over in silence,—"Up to this point the inclinations [*penchants*] of which I have spoken are not yet included among those which characterise a true alienation. These inclinations necessitate the most energetic measures, and criminals of this kind cannot be tolerated in society. Most of them even, in order that they may not destroy men, ought to be themselves killed like ferocious beasts." This is a notable admission of the German philosopher that a man suffering from detestable inclinations or dispositions which have their sole origin in a vice of the organisation, is yet not a lunatic and ought to be punished.

The French medical advocates of homicidal monomania whom we have named all admit that there are two distinct forms of the malady; one in which there is delusion or some other recognised form of insanity, and the other in which no derangement of the intelligence exists. It is true that they put the assertion in a somewhat less positive form than this, a saving clause being usually introduced, like that of Esquirol, who, after asserting the existence of this kind of insanity, says that "On ne peut pas observer aucun désordre intellectuel," and a corresponding loop-hole of hesitancy in statement is generally met with in the writings of our physicians who embrace the theory; although I think that, from Esquirol down to the last English writer on the subject, no one would be inclined to admit that, if any intellectual disorder did really exist, it would be likely to pass undetected by their skilful methods of inquiry. Their argument, moreover, in favour of homicidal insanity without any intellectual disorder, is founded, not upon the probability of intellectual disorder escaping detection, but upon other grounds—namely, upon the assumption that the passions and affections, or the will itself, may be diseased. Esquirol, quoted with approval by Georget, expresses this last argument with his usual precision. "If the intelligence and even the moral sensibility can be perverted and abolished," says he, "why should not the will, that complement of the intellectual and moral being, not also be deranged or destroyed? Is it that the will, like the understanding and the affections, does not experience vicissitudes according to a thousand circumstances in life? Has the will of the infant and the old man the same force as that of the adult? If it be so, why should not the will be subject to troubles, to perturbations, to morbid weaknesses, however incomprehensible the state may be to us?" A weighty passage this seems to be, not only in support of the theory of our recent English writers who have declared that insanity is a disease of the will, but as a caution to our legal authorities that they should not needlessly vivify this Frankenstein of a will, for if there be a criminal will there may possibly be a diseased will. But surely both lawyers and physicians have something more certain to speak about than the attributes of the will.

Esquirol's description of this kind of homicidal insanity has become classical, our own authors having added nothing to it, and only altered it by changing the words "puissance irrésistible" into their new shibboleth—uncontrollable impulse. "There exists," he says, "a kind of homicidal monomania, in which one cannot observe any disorder of the intellect; the murderer is impelled by an irresistible power, by a dragging onwards, which he cannot overcome, by a blind impulse, by an unreflecting determination. One is incapable of imagining that which carries him without interest, without motive, without intellectual error, to an action so atrocious and so contrary to the laws of nature." That is the statement around which all this discussion rages, and which has been called nonsense and mischievous rubbish by English judges, and by terms not more complimentary by legal authorities in the country of its origin. That is the statement of fact supported by the theory that the will becomes insane, which Caspar condemns in these decisive words: "We arrive at the dogma that *there is no such peculiar species of insanity as is termed homicidal insanity, or homicidal monomania, and that forensic medicine neither can nor ought to recognise any such.*" Yet it is to this statement of fact our English authorities on the irresponsibility of the insane still adhere and support under the slightly altered designation of homicidal or impulsive insanity, or uncontrollable impulse to kill.

It is of the first importance to understand, if we can, what is meant by an uncontrollable impulse to kill. Legal authorities, who have not unnaturally shied at the phrase, have, I think, been scared by the wrong end of it. They object to the predicate *uncontrollable*, averring that it means that which is not controlled, whereas there can be no doubt that the medical writers who have used it intend to designate by it action which cannot be controlled; and, as we have seen, this is the very essence of an act for which an insane person ought not to be held responsible. The subject *impulse* seems to me to be really the mischievous factor in the proposition, in its misleading application to intentional action—that is, to conduct. A recent medical author, whom I much respect, speaks of it as a "sudden blind, motiveless, unreasoning impulse to kill"; and another author as "the frightful *impulses* which spring up in the diseased mind, and drive the individual to a deed of violence—as little under control as the convulsions of epilepsy, and the origin of them, perhaps, as little within the individual's knowledge as the origin of the impulse which entered the unfortunate herd of swine and drove them over a steep place into the sea, so that they were drowned, was within their knowledge." And I might multiply quotations, perhaps not quite so strong in epithet or remarkable in simile, but all stamped with the same belief that nothing exists, and nothing is wanted, "between the diseased condition and the act" save and except this *impulse*, the characteristics of which seem to me quite unlike those of any other mental state resulting in conduct. What is this strange power which, unconnected with the sequence of mental movements, arises without precursor; which is blind, although it attains its object; which has action without motive, and comprehension without reason? I must own that, to my mind, this term "impulse" is a word which darkens knowledge, and that its use seems wrong and misleading, in that it pretends to give the appearance of explanation to a problem of life which it is greatly to the interests of the community should be clearly stated and thoroughly unravelled. Suppose we change the word to its synonyms, and say disease of the brain gives rise to a sudden blind, motiveless, unreasoning *push* or *thrust* forward to kill, just as inclination means the mental *bend* forwards. There is no desire or motive or reasoning intention to strike the blow, but only that which we call a *push* received from the diseased action of the physical organ. No doubt impulses of the mind are spoken of in the slack and slovenly parlance of common life, to express rapid wishes and desires, whether they be or be not checked by others of greater force, as when it is said that a man has an impulse to throw himself from a height, which is an unreasonable desire very frequently felt, but very rarely indulged. To say that I have an impulse to throw myself over a precipice, but that I have a stronger impulse not to do it, is an odd use of language, which seems to lead to the conclusion that the word "impulse" is used instead of the word "desire" or "wish," when, upon reflection, the thing we wish to do or are impelled to do seems to be wrong or bad or mischievous. And with regard to the many men of whom we must believe that they have had the wish to kill, but the stronger wish not to kill, what do we get but ambiguity and obscurity of meaning by saying that they have had frightful impulses to commit murder, but stronger impulses not to commit murder? It may aid us in our inability to understand what is meant by this so-called impulse to murder, if we compare it with the so-called impulse to commit self-murder. Referring to this, the author above quoted remarks: "It is certain that there is an exactly similar form of mania or monomania in which *the patient is possessed with an impulse to kill somebody*, is infinitely miserable in consequence, *yet exhibits no other mental derangement.* ..... But there is not the same willingness to recognise disease when the morbid impulse is not suicidal but homicidal." As an "example of uncontrollable morbid impulse with clear intellect and keen moral sense," he gives the case of a lady who was seized with a strong and persistent suicidal impulse, without delusion or disorder of the intellect. All the fault that could be found with her intellect was that it was enlisted in the service of the morbid

propensity. She secretly tore her night-dress into strips while in bed, and was detected in the attempt to strangle herself with them. For some time she attempted to starve herself by refusing all food. She threw herself into a reservoir and was nearly drowned. After this she gradually regained her cheerfulness and love of life. Now it is to be remarked that in this and in other cases of a like kind the morbid impulse is long enduring; that it gives rise to actions of patient deliberation and of cunning contrivance; and therefore that the word "impulse" seems as inapplicable to such a persistent desire as it would be to say that, Cruden, being insane, had an insane impulse to write the Concordance. Socially and ethically, the difference between suicide and murder is enormous, notwithstanding that they are so often the joint results of undoubted insanity. But who will affirm that the desire to end one's days is not controllable, and is not constantly controlled by fear of a greater evil?—not, indeed, by the exposure of the naked corpse, which is said to have stopped an epidemic of suicide among young women, but by the fear of shame among one's fellow-men, the fear of grief and ruin for those we love, and above all, by

> "The dread of something after death.
> Thus conscience doth make cowards of us all."

I find it difficult to advance arguments in contravention of the theory of homicidal insanity depending upon disease of the will, or against insane impulse to kill, without motive and without other mental derangement, simply because I cannot understand it; but the statement of fact that it is certain that there is such a form of disease deserves our earnest attention.

In the earlier editions of the "Manual of Psychological Medicine," fifty of the more remarkable cases of homicidal insanity on record were analysed by my indefatigable fellow-labourer in that work, and of these no less than thirty-five displayed no marked disorder of the intellect. Of the fifteen remaining cases, in ten there were delusions, and in five deficiency of intellect, and these of course came under another category altogether. Unfortunately, out of the whole number of fifty cases, only four have an English reference, and of the foreign ones almost the whole are from Esquirol and Marc, with a few from Otto, all of whom are committed to the theory, and whose accuracy of observation as to the facts is the very point at issue. Moreover, the French law of insanity is essentially different from our own, the sixty-fourth section of the code enacting that "there is neither crime nor offence when the accused was in a state of insanity at the time of the action," thus leaving the whole question widely at large, so that the proof of any state which can be deemed insanity is sufficient to exonerate. Of the English criminal cases which have been cited by various authors as examples of homicidal and impulsive insanity, those of which I have been able to obtain any information do not seem likely to bear thorough investigation. The celebrated Morningside case, if I am rightly informed by one of the most eminent physicians of our day, was clearly one of chronic lunacy with delusions. He has been seen with a placard on the wall over his bed, with the words "I am God Almighty." In Dr. Pownall's case I am informed that the delusions of persecution and poisoned food which existed before the homicidal, but could not be detected during his residence at Bethlem, are now again quite recognisable. In other cases which have been referred to as instances of homicidal insanity, no insane impulse nor other sign of mental disease has been discovered after acquittal. Bisgrove, whose case has been so frequently referred to, never manifested any symptoms of mental disease while at Broadmoor, and I venture to assert that there is no example of *monomanie homicide sans delire*, or of impulsive insanity to kill, which can be referred to as existing in any English asylum in which there are no other symptoms of mental disease. In all my own experience, which is not small, I have never met with such a case, and I have made inquiry of two of my friends whose means of observation have been of the largest, and whose methods have been the most accurate and trustworthy, and each of them has assured me that he has never met with a single instance of homicidal insanity without other distinct symptoms of mental disease. When I mention the names of Dr. Crichton Browne, the Lord Chancellor's visitor, and for a long time the medical chief of the vast West Riding Asylum, and of Dr. Orange, the medical superintendent of Broadmoor, and add to their names my own, I think I present to you a trio of observers whose field of experience has been so wide that a form of insanity so pronounced in its characteristics as that under discussion could scarcely have failed to be embraced within it. Certainly I think such an event highly improbable, but that instances of men suffering from the so-called uncontrollable impulse to commit homicide without other mental disease should have come within the field of our observation, and yet not have been observed, is, I think I may say, impossible. The truth seems to be that homicidal lunatics are only too common, and that if you inquire carefully you will always find the lunacy, but that if you do not look carefully the prominent symptom of homicidal violence cannot escape attention, although you may possibly fail to observe its concomitants.

I am glad to be able to support this opinion with the concurrence of the late Dr. Morel, of Rouen, the most able, as I think, of French alienists. He declares that the cases in which an individual is said to be dragged by a blind instinct to kill, "*par quelque chose d'indefinissable que le port à tuer*," must be very rare, and that facts of this kind rest upon incomplete observation of pathological phenomena and ignorance of the motives which influence the insane. The conclusion therefore to which we must come is that homicidal insanity—the impulsive insanity to kill—is either due to imperfect observation, which has failed to detect real derangement, or to a mistaken estimate of a real criminal.

A FOURTH SERIES OF CASES OF HÆMORRHOIDS AND PROLAPSUS OF THE RECTUM, OPERATED ON BY THE CLAMP AND CAUTERY.

By HENRY SMITH, F.R.C.S.,
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NEARLY three years ago I brought before the profession a third series of cases in which I had performed the operation for hæmorrhoids and prolapsus of the rectum. At that time I had adopted the method of removing them by means of the clamp and cautery in four hundred cases. Since this period the number has amounted to five hundred and thirty cases, and although the operation has become so well established that it seems hardly necessary to bring it again specially before the notice of the profession, at the same time I think it possible this one further record of a large number of cases may be acceptable to those who are either practising the method in question or may be in some doubt as to its value. Moreover, there are one or two points connected with the treatment of practical value, upon which the additional cases throw some light, and to which I wish to call special attention.

Without going into unnecessary details, I may at once say, and I say so with great satisfaction, that although in this last series the cases have been on the whole much more severe, I have no death to record; in fact, the one case I had to speak of in the last series, and the particulars of which were fully detailed, was No. 315, so that I have now performed the operation on two hundred and fifteen occasions without a death or other serious mishap; and, indeed, I may almost say that I have scarcely had a moment's anxiety about any of them. Moreover, I am able to mention, so satisfactory have the results been, that it has not occurred to me to make any addition to or modify the mechanism of the instruments employed.

I have stated that in the present series the cases have been more grave; indeed, in several instances which have been brought to me by my professional brethren the patients have been reduced to the verge of extreme danger by severe and long-continued losses of blood, and so bad was the condition of some of them that it would appear rash to interfere. Thus, in one case of a clergyman lately brought to me by Mr. Roberts, of St. John's-wood, he will bear witness to the fact that the patient was so reduced by bleeding that he fainted away whilst in his pulpit, yet a rapid recovery ensued. In another case, sent to me by Mr. Jackson, of

Wimpole-street, a lady on whom he had been urging an operation for years was so reduced by hæmorrhage that we seemed to be resorting to a desperate measure; but I experienced no anxiety about it, and the case recovered well. In another lady, sent to me by Dr. Wilson Fox, the hæmorrhage had been so great that, on visiting her, she had exactly the appearance of a dead person, but I did not hesitate to operate with the clamp and cautery. In fact, my recent experience has confirmed the observation I have made before, that those cases where the patients have been so much reduced by bleeding seem to recover as well as any other after this operation, whereas we know that long-continued hæmorrhage is, as a rule, a serious bar to the success of severe surgical operations, and especially conducive to the advent of pyæmia. Not only the surgeon but the accoucheur is frequently made painfully aware of this fact. In my former series of cases I congratulated myself on the absence of pyæmia; this same immunity has fallen to my lot. I especially rejoice at this good fortune, for although pyæmia is not frequently met with in private, I regret to say that in my own private practice I have met with four instances where death has followed such simple operations as phimosis, the operation for varicocele, division of stricture of the rectum, and for ligature of hæmorrhoids, from this cause. I believe the application of the cautery acts as the very best antiseptic we possess, and hence, I apprehend, the freedom from pyæmia so happily noticeable in my operations.

In the last series of 100 cases it was noticed that I had to report the details of no less than seven instances where hæmorrhage to a greater or less extent occurred after the operation. I accounted for this fact by having indulged in a certain amount of false security, and thus did not employ the cautery so freely as I should have done. Being thus taught wisdom, I have in my last series of cases used the cautery very freely, and have taken care not to let any bleeding vessel get out of sight: hence I have had no further trouble. In one case only, of great severity, did a patient have a smart bleeding on the second action of the bowels after an operation. The patient moved about too freely, and allowed his bowels to act without an aperient; the result of the straining was a bleeding, which made him faint, but it did not recur. As a rule, the bowels should not be allowed to act for the first three or four times without medicine. I am particularly pleased that I have no cases of severe bleeding to record, because those who have objected to this operation suggest as their main reason the probability of its occurrence, and my own recorded experience confirms this; but then I firmly believe that the occurrence of hæmorrhage is due either to the carelessness of the surgeon or the inefficiency of his instruments. I repeat here what I have often stated before in public, that neither I nor any of the house-surgeons at King's College Hospital have had to plug the rectum in a single instance of hæmorrhage after the use of the clamp and cautery. This fact I think is a sufficient answer to those who affirm that serious hæmorrhage is likely to occur. I am happy to say that not a single case of erysipelas has occurred after these operations.

Curiously enough, whilst I had only to report one case of abscess and fistula as occurring after this operation in the last series, I have to state that out of the present number there were three patients who suffered from abscess and complete fistula as the direct result of the operation; but I may distinctly affirm that in each of these cases the general health had been much reduced by the local disease and hæmorrhage. I think I can also account for the increase of this accident by the fact that in order to prevent bleeding I have accustomed myself now to apply the cautery much more freely than I used to do. This may have had nothing to do with it, but, in thinking over the matter, it has occurred to me that this may have been one element in the production of the condition which in two out of three cases was of a very slight nature.

In three cases contraction of the bowel has occurred. In two out of the three cases it was distinctly due to the operation; in the third—a very severe case of prolapsus, which was brought under my care by Mr. Thomas Wakley—there was reason to believe, from the history, that the contraction had existed previously. This condition yielded in each case to the use of the bougie. It may be obviated altogether by taking care in the first instance not to remove external skin to any extent, and at the same time not to be too free in dealing with the mucous membrane itself. Moreover, it is well to tell the patient to pass a bougie for himself every other day for a month in cases where the operation has been very extensive. By this means all fear of contraction will be removed.

A tedious and painful convalescence has occurred in two or three instances where the operation has been very severe and the health much reduced, as in a case of a lady recently sent to me by Sir William Gull. She was much afflicted with gout, and had suffered terribly from hæmorrhage, and was altogether a very bad subject. Here the after-suffering was great, and the wounds made healed but slowly. In another case, that of a military officer who had to undergo a very severe operation, acute suffering occurred. The wounds were long in healing. I could not account for his symptoms. Getting tired of me, he consulted another surgeon, who informed my patient that he had a fistula, and must be operated on. Alarmed at this, he consulted a very eminent man, who told him he had not a fistula. Wearied by this diversity of opinion, he, in despair, returned to me, and I could not discover any fistula, but only a slight cul de sac, into which a probe could be passed a little distance. Everything was quite healed by this time.

As to the age at which I have dared to perform this operation. In the last series I had operated on a patient aged eighty-one with success; and, emboldened by this, I did not hesitate to operate on a very severe case of prolapsus, to which I was called by Dr. Brodie Sewell, and where the patient had reached eighty-two. The case was very pleasing in its results alike to the patient, Dr. Sewell, and myself. In both these instances the operation was, of course, only undertaken because the individuals in question were suffering most severely. I have performed the operation on many old people, and, curiously enough, they seem to do as well as their juniors.

I do not know that there is anything else connected with these cases to which I need draw attention, as now the operation has become generally recognised, except by a few surgeons, and the number of my cases has been such as to lead to the formation of a correct judgment. I shall not furnish any more statistics, unless something very special should occur. I am glad to find that the ligature is gradually giving way to the clamp and cautery, and I doubt not it will in time be entirely abolished.

As I have before stated, I have made no alteration in the mechanism of the instruments. I am old-fashioned enough to use the iron still heated in the fire, and not by the ingenious lamp constructed for me by Mr. Matthews, in using which, on one occasion—through the imperfection of the valve—the lighted spirit escaped, and nearly set fire to the patient's house. Nor do I use the thermo-cautery. I still make use of the clamps furnished with ivory wings, which my old friend, Dr. Wiblin, has ridiculed by terming them a "pretty toy." I find that the Messrs. Matthews construct these clamps with the utmost nicety, and I have had no mishap with them.

I am glad, also, to be able to state that in not one single instance have I failed to arrest hæmorrhage by the cautery, and in only one case have I had to operate a second time on the same patient, and this is just recently in the case of a lady, who had been brought to the verge of death by hæmorrhage from a large mass of hæmorrhoids. Dr. Ellison, of Windsor, asked my assistance, and I operated some eighteen months since. A good recovery took place, after a lengthened convalescence. She, however, was, on two or three occasions, seized with severe bleeding, which could be arrested by nitric acid. Recently, however, a severe loss of blood occurred, and Dr. Ellison brought her up to town. Mr. Prescott Hewett was requested to meet us, and on careful examination with a speculum we could find no trace of the hæmorrhoids left, but at one point, just within the sphincter, we could bring into view a kind of vascular tuft, from which issued arterial blood in large quantities, whereupon we applied the clamp and cautery to the spot, and thus arrested the hæmorrhage. In concluding these remarks I cannot help expressing my gratification at the testimony recently given by Mr. Allandale as to the merits of this method of operating. This distinguished surgeon has carefully and frequently used it, and, so far as I can judge, appears to have discarded the ligature entirely.

Wimpole-street.

DR. T. S. GILL, Kensal-green, has received the Government grant, £12 12s. (second time), for successful vaccination in his district.

ON THE OCCURRENCE OF COLLAPSE, EMPHYSEMA, AND DESTRUCTIVE PNEUMONIA IN ASSOCIATION WITH TUMOURS COMPRESSING THE BRONCHI.

BY J. PEARSON IRVINE, B.A., B.Sc., M.D. LOND.,
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(Concluded from p. 483).

THE first series of cases which I have given seem conclusive proof of the occurrence of destructive pneumonia from pressure on the bronchi simply; and remembering these cases, and after a full consideration of Sir William Gull's series, I presume to think that the latter do not justify the exclusive view which he has advanced. In the first of his cases possibly the bronchus was affected; in the second it was undoubtedly compressed; and in the third, though it is expressly stated that fibrous thickening involved the bronchus without narrowing or compressing it, it is not clear that this tube was not twisted and thus obstructed, as occurs almost invariably in fibrous thickening of a tube—in syphilitic disease of the bronchi, for example. I cannot but think that fibrous thickening of a bronchus must to a certain extent impede it, and that this impediment might be very serious in expiration if the explanation which I have given above be anything like correct.

Sir William Gull does not believe, with Schiff, that in cases where the nerves are affected nutritive disturbances cause the vast changes. His opinion is that the bronchi and vessels are paralysed; that, in consequence, the bronchi cannot empty themselves, and the pulmonary capillaries become unable to transmit blood through their channels. Sequentially the bronchial tubes dilate, the pulmonary tissues become congested, and exudation (hepatisation or purulent infiltration) follows. And it is clearly the fact that accumulation of secretion in the bronchi is the immediate source of mischief—of imperfect circulation, and of the ultimate changes met with in destructive pneumonia; but this accumulation is above all apt to occur in cases where the bronchi are impeded by an immovable obstruction. Thus I would explain the occurrence of this pneumonia on the simple views by which I have tried to explain the occurrence of emphysema. There is simply an extension of the mischief. Emphysema having been developed in the way alleged, the obstruction of the bronchus becomes greater and greater with the continuous growth of the tumour affecting it, and at length neither air nor secretions can pass freely outwards; the bronchial membranes become irritated and inflamed, greater secretions are poured out, and these accumulate rapidly in the air-tubes behind the obstruction. The greatest interference with respiration must happen, and the greatest interference with circulation in the lungs; the air becomes displaced and absorbed gradually; the secretions must excite a growing pressure not only on the inner surface of the bronchi but on that of the air-cells, and the lung-tissue must become destroyed—all the factors at work leading to ulceration, suppuration, or even gangrene in it. But the whole process is gradual, and the lung, originally emphysematous, may, even in its destructive stages, remain large, and more than fill, as originally, its half of the chest. In Sir William Gull's cases (in two at least) the affected side had fallen in, so that the lung must have been smaller than normal, and he believes that collapse occurred with paralysis of the bronchi. But the cases were only a brief period under observation, and I see no reason why in them emphysema may not have been the first result of the tumour. The emphysematous lungs may have collapsed (even apart from any pressure on nerves), and destructive changes followed in the manner advanced. In cases of adults with firm chest walls, where great collapse occurs, one would expect to find a certain amount of pleuritic effusion, as in the case of the woman with mediastinal tumour reported early in this paper; and in Sir William Gull's cases (where the side became flattened) it is probably more likely that the collapse, which cannot have been great, judging by the description, came on as a consequence of the accumulation of secretions and of the absorption of air in the vesicles—a gradual phenomenon unlike what one would expect in paralysis of nerves; and, indeed, in many cases where the lung is not greatly diminished in size, explanations might be given of the change other than a theory of primary collapse. Where the tumours compress the bronchi and nerves at the same time, it is quite possible that injury to both has a share in causing collapse of large portions of a lung—as a lobe for example. Smaller collapses are common enough, but the latter not by any means common. In my case of mediastinal tumour the collapse of a whole lung occurred shortly before death, that of the upper lobe being certainly due to the pressure of the tumour. The collapsed lung could be easily inflated, and was then found to be emphysematous, as was the opposite lung, both bronchi being impeded. The nerves on both sides (the pneumogastries) were involved also, but there was no collapse on the right side. In a case in the Pathological Transactions (vol. xvii.) by Dr. Foster, an aortic aneurism pressed on the left bronchus; the history indicated sudden collapse, followed by effusion, which in hospital increased rapidly. It consisted of clear straw-coloured serum, as in my case, where what may be called "hydrothorax ex vacuo" seems to have occurred. Symptoms of effusion in Dr. Foster's case commenced a fortnight before death. Sir William Gull believes that in the three cases to which I have alluded at length lobar collapse took place.

It is certain, then, that collapse of lobes may result from the pressure of tumours at the roots of the lungs. It is not quite easy to say how much of this is due to pressure on nerves, how much to pressure on bronchi. It is a remarkable fact that, where collapse has distinctly occurred, there is mostly found stretching of the vagi as well as bronchial impediment, and it is not difficult to understand why collapse should occur in such instances. It is quite possible that in them faulty innervation may be followed by paralysis of the bronchi and accumulation of secretions—the latter all the more readily because of the impediment in the air-tubes. A case which I reported to the Clinical Society bears greatly on this question. It was one of diphtheritic paralysis in which the inspiratory muscles were affected at the upper part of the chest, and in which the bronchi appear to have been paralysed. Collapse of the upper lobes occurred, and was recovered from as the paralysis disappeared from about the chest and elsewhere, and was, no doubt, due directly to the want of innervation.[1] Thus it is quite possible to agree with Sir William Gull that paralysis of bronchi might be followed by collapse, and, if protracted, by other lung changes, though, at least in some of his examples, other factors were probably at work.

It is clear, however, that collapse in bronchial compression may occur altogether apart from nerve influences. Hertz[2] thinks such occurrence very rare. He quotes an instance reported by Dr. Cockle,[3] in which the whole of an upper lobe collapsed because of pressure on the right bronchus by enlarged glands. The suddenness with which the collapse came on in my case, and probably in Dr. Foster's, would hardly indicate bronchial paralysis as its cause. It seems more likely that in the debilitated condition of the patient a sudden inertia in respiration was the immediate cause. A feeble inspiration would not be able to overcome the bronchial obstruction, and the chief bronchus of one lobe might be further blocked by secretions. In such an accident collapse would be all but inevitable, and, once started, would be favoured by the conditions which had so long existed. The thorax being firm, in a state of chronic fixed inspiratory expansion, effusion into the pleura of fluid free from all inflammatory constituents would follow rapidly—in short, the train of events met with clinically in my case, and verified by post-mortem examination. It is clear that Dr. Gairdner's theory of collapse may help greatly to explain instances occurring even in outside pressure of bronchi. This is not the place to enter into a general discussion of the causes of collapse: it seems possible that in cases of pressure by tumours on bronchi collapse may be an accident only indirectly due to such pressure, and capable of explanation by the well-known theories of several physicians of this country.[4]

I have drawn fine lines as to particular pulmonary results of bronchial compression, because the instances on which I depend justified such a course. But there must often be mixed phenomena not so readily explained as regards sequency. Thus we can understand that in cases of bronchial

[1] A case of diphtheritic paralysis simulating extensive lung disease. Clinical Soc. Trans., 1876.
[2] Ziemssen's Cyclopædia. [3] Assoc. Med. Journal, No. 294, 1858.
[4] Sir William Jenner, Drs. Gairdner, Wilson Fox, and Grailly Hewitt, amongst others.

compression there may be "collapse of sections of lung," "emphysema of individual sections," "localised spots of suppuration," &c., which have been mentioned by different writers.

It thus seems possible to reconcile the views of various authors. In Sir William Gull's first case, for example, emphysema may have been the primary consequence: collapse may have followed from one of the many causes of collapse—possibly from bronchial paralysis,—in which case the existing emphysema would greatly favour the accumulation of secretions, and all those results to which all agree they can give rise. I am far from supposing that the pages I have written and the cases I have adduced even approach a settlement of the many questions involved, but I trust they do show the pathological and clinical interest of the whole subject. It is plain that such cases are far from being bedside and post-mortem curiosities. In considering the subject I have chiefly taken as authorities our own observers, because foreign writers have not given them that care which their work justly claims. I venture, however, to summarise what I have written. Where the main bronchus of a lung is impeded and gradually obstructed by outside tumours or by fibroid changes in its walls (such as those met with in syphilitic strictures or malignant disease of the mediastinum), expiration is early on interfered with chiefly; and in direct consequence of the bronchial obstruction the following morbid states may result:—(1) Emphysema on the side affected, and this of decided degree; (2) lobar collapse of the emphysematous lung; (3) lobular collapse and its sequelæ; (4) destructive pneumonia apart from collapse; (5) destructive pneumonia in association with collapse; (6) extensive clear effusion into pleura as a consequence of rapid lobar collapse. In any of these accidents others may occur. For instance, the compressing tumour may be aneurismal and rupture into the bronchus; in such a case we might have (1) the so-called pulmonary apoplexy; (2) changes secondary to this should the patient survive any length of time.

I have not taken into account the consequences of direct compression of lung by tumours, nor the pleuritic effusions or the pleuro-pneumonia which may result from simple extension of inflammation. Leaving for the moment nerve-paralysis out of the question, I repeat that I think it proved that emphysema, collapse, and destructive pneumonia may follow on simple obstruction of the bronchi by tumours without. I have admitted paralysis of nerves as a cause of collapse, but I believe this is a far rarer cause of this accident than simple stenosis, and I do not believe that the destructive changes met with occur in association with nerve-paralysis alone. The clinical aspects of these cases are more important than they might at first seem, as regards diagnosis and treatment. For treatment, as Dr. Walshe and others have shown, can alleviate greatly in mediastinal tumour, and the first case I report is an excellent example of the same truth. Many of these tumours are also aneurismal, and as our treatment of this disease within the chest is rapidly improving, everything bearing on its diagnosis becomes of more and more value. I need not point out how obscure these tumours frequently are, and that terminations painful to the friends are a frequent and unexpected occurrence. It is clear, therefore, that a more accurate knowledge of the secondary changes which they can produce may at least warn us of the possibility of such tumours, and thus guard against many a painful *dénouement*.

Mansfield-street, Cavendish-square, W.

THE ARTIFICIAL PRODUCTION OF HUMAN DISEASES IN THE LOWER ANIMALS.

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PHYSICIAN TO THE MURRAY ROYAL INSTITUTION, PERTH.

(Continued from p. 492.)

Pulmonary consumption is one of the most common and most fatal diseases in (1) menagerie animals, (2) domesticated animals, and (3) home pets. Among the denizens of our zoological gardens phthisis is specially fatal in the quadrumana. It is notoriously the disease to which monkeys most frequently succumb; but to the chimpanzee, orang, and others of the anthropoid apes, it is also very fatal. Monkeys in the zoological gardens of London, we are told, "are generally tuberculous; they die of tubercle. ..... There is no special disease that is peculiar to monkeys as with children."[1] But consumption in menagerie animals is by no means confined to the quadrumana; it proves fatal in very different classes, orders, genera, and species. Thus Lloyd[2] describes it in the porpoise in confinement; and it occurred also in an Indian antelope, which became a regimental pet and accompanied a certain regiment home.[3] Again, a couple of Arctic foxes, that had been confined all winter and spring in the engine-room of one of the steam yachts of the German Arctic Expedition, died of pulmonary tubercle, according to Dr. Copeland.[4]

In the case of menagerie monkeys in this country phthisis and deaths therefrom are usually attributed to the cold and damp of the English climate. Pierquin ascribes this fatal phthisis partly to nostalgia, as well as to extreme change from the humid heats of protected tropical forests to the cold winds of exposed Europe. But other influences are also at work: such as foul air, overcrowding, want of exercise, *ennui*, unsuitable food and drink, the sense of captivity, repression of the sexual and other instincts, artificial light, and the excitement of being visited and exhibited. In the case of the Arctic foxes above quoted the effects of captivity, inaction, artificial light and heat, foul air, and improper food are more apparent, as they are more direct. But in all cases of animals held in captivity by man we have phthisis developed, or other forms of tuberculous disease, as the result of subjecting them to artificial, unnatural, and unhealthy conditions. And it is precisely in parallel circumstances that man is so incessantly manufacturing phthisis in himself and his fellows: in the close lanes of our cities; in the crowded dwellings of these lanes; and in our overgrown poorhouses, barracks, and hospitals for the sane and insane.

Pulmonary consumption, however, is not the only form in which fatal tubercular disease is developed in and by captivity. For the death of a chimpanzee (originally from the Congo district, Western Africa) in the Zoological Gardens, London, is recorded as having resulted from tubercular peritonitis;[5] and tubercular deposit in the abdomen is specially mentioned also in the heifer.[6]

Nor is phthisis the only disease of the lungs to which menagerie captives are liable. Thus a whale, that was quite recently exhibited in the Westminster Aquarium, London, died from "plastic pneumonia," according to the post-mortem examination performed by Professors Flower and Garrod; while it had also had non-fatal cerebral congestion.[7] On the other hand, a non-fatal case of inflammation of the lungs occurred in a young gorilla in the Berlin Aquarium, which was treated successfully by Dr. Falkenstein with quinine and Ems water.[8] The death of an old lioness, well known to all frequenters of the Zoological Gardens, Dublin, as "the old girl," took place there from chronic bronchitis in 1875.[9] Bronchitis and its Treatment in the Canary is the subject of an article in the *Animal World*";[10] dyspnœa, causing screams of pain—a convulsive dyspnœa, otherwise spoken of as intercurrent convulsions—and unconsciousness, are described as among its phenomena or results.

In the experiments of Dr. Richardson, of London, bronchial catarrh and irritation, the formation of tenacious mucus in the bronchi, with congestion of the lungs and an inflammatory condition of the blood, were artificially produced in carnivorous animals by exposing them to the influence of ozone or ozonised air; the Carnivora being found to be more susceptible than the Herbivora.[11] And Professor Redfern, of Belfast, has also pointed out the occurrence of pulmonary emphysema and congestion in animals poisoned by the respiration of pure oxygen and of oxygen mixed with ozone.[12] Bronchial catarrh has also been produced in rabbits by the inhalation of ammonia.[13] Certain cage birds are liable to asthma, as well as to consumption, according to Miss Buist. What is called "asthma" is also common in old cats.

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[1] Brit. Med. Journal, April 11th, 1874, p. 494.
[2] "Of the Crystal Palace Aquarium, London." In the Scottish Naturalist, Oct. 1874, p. 357.
[3] Article on "Animal Volunteers" in Chambers's Journal, April, 1875.
[4] In his account of the Expedition, p. 473.
[5] Nature, March 12th, 1874, p. 372; and Athenæum, March 14th, 1874, p. 360.
[6] Brit. Med. Journal, Oct. 3rd, 1874, p. 442.
[7] Scotsman, Oct. 2nd, 1877.
[8] Nature, Nov. 9th, 1876.
[9] British Medical Journal, June 24th, 1876, p. 794; and North British Daily Mail, Jan. 14th, 1876, quoting from the Report of the Royal Zoological Society of Ireland.
[10] For February, 1874, p. 20.
[11] Diseases of Modern Life, p. 62.
[12] Athenæum, Sept. 15th, 1874, p. 319.
[13] British Medical Journal, Dec. 13th, 1873, p. 697.

In connexion with disease of the lungs or bronchi, it is noteworthy that not only does cough occur in the dog, sheep, and other animals, but it can in them be artificially excited by the same means by which it can be produced in man. Camels in Mongolia catch colds and coughs by exposure to damp.[14] My attention has specially been called to this phenomenon of late, because in my daily walks (in the country) I have frequently heard a certain sheep coughing in the most human-like fashion.

Menagerie and other captive animals are subject to many other diseases besides those of the lungs, and those that are tubercular. Of those other diseases *Diarrhœa* is one of the most common. Thus, fatal diarrhœa occurred in a Bengal elephant that had just been imported for Sanger's circus, London, in August, 1876,[15] the cause here being no doubt the insanitary conditions in which it was forced to live on shipboard. Diarrhœa is one of the scourges of the parrot-tribe in confinement,[16] being usually attributed in them to unsuitable food. But here, as in so many other cases of disease in captive animals, it is impossible to dissociate the influence of dietetic errors from other numerous and perhaps even more powerful causes of disease. It may well be, however, that while the latter class of causes belongs to the category of predisposition, the use of improper food and drink may be the exciting cause. Diarrhœa is common also in the cat, dog, calf, and other animals.[17] Opium causes it in the dog, according to Professor Russell Reynolds.[18] Diarrhœa, followed by collapse, in the rabbit has been artificially produced by the inhalation of cholera evacuations, according to Dr. Andreas Högyes, of the University of Pesth (Hungary),[19] but diarrhœa followed by collapse, under such circumstances, probably belongs rather to the category of *Cholera*, concerning which I have already said so much[20] as artificially producible in the lower animals that it is not necessary here to recapitulate my own views or results. Mr. W. A. Lloyd, of the Crystal Palace Aquarium, London, speaks of a "choleraic disease" as "common among aquarium animals when the water is changed."[21]

Dysentery, gastro-enteritis, acute enteritis, and other inflammatory diseases of the stomach and intestines, are not infrequent in captive animals. Thus my friend Dr. George Bennett, of Sydney, New South Wales, reports the death at sea, of dysentery from cold, of a pet siamang.[22] It is met with in the common cuckoo, in which it is treated by the same sort of remedies that are used in the dysentery of man—viz., chalk and ginger.[23] Dysentery also occurs in bees that are too long and too closely confined. Subacute gastritis, followed by jaundice, was artificially produced in dogs by Prof. Jaffé, of Königsberg.[24] Catarrh of the stomach and intestines is producible in dogs by (1) the administration of sulphate of copper and (2) the subcutaneous injection of croton oil.[25] Acute gastro-enteritis and gastro-intestinal catarrh, sometimes fatal, may be induced in the dog and rabbit by the injection of cholera discharges into the venous system, according to Högyes.[26] The death of the celebrated Pongo, the young gorilla quite recently exhibited in London and Berlin, as ascertained by post-mortem examination by Professor Virchow in the latter city, was acute enteritis, "the same disease which carries off young children so rapidly." Whether or not the fatal disease was due in any measure to unsuitable food, it is at least a fact, which the said examination revealed, that "the button of a glove, iron wire, and pins," were found in his stomach.[27] In all probability, in this and other cases among the lower animals that become celebrities in their way, just as in the case of man, post-mortem examination, in association with an overweening belief in the importance or significance of pathological anatomy, is apt to mislead as to the real causes of death. What is seized upon by the expert employed is the demonstrable morbid condition, whatever it be,[28] while the real cause of an animal's death may have been something quite different—something obvious to the common-sense onlooker, though not demonstrable by the scalpel. Pongo's is a case in point. Here is a different kind of opinion as to the cause of his death—a popular opinion, an opinion of the press, which is practically of much greater value than the opinion of the great German pathologist, because it embodies an important lesson in the common-sense treatment of exhibited animals. "From our experience of the life Pongo led," says a writer in *Land and Water* (no doubt Mr. Frank Buckland himself), "during his short sojourn in England, we should say the cause of death was dissipation. Late hours, unwholesome food, and the excitement of being constantly interviewed, were too much for the poor animal."[29] Possibly it is from setting up acute enteritis from retention of fæces that death has occurred in the horse from not allowing it time to evacuate its bowels.[30]

Home pets, such as cage-birds, have certain diseases of their own, due to man's negligence. Thus *gangrene* of the toes is liable to occur in many birds, including the lark and warbler, from their toes being habitually clogged with their own ordure—in other words, from want, on man's part, of due attention to their cleanliness, according to Bechstein. The parrot dies sometimes from eating the feathers stripped from its own body,[31] a singular instance of that *morbid appetite* which is so commonly exhibited by the lower animals in various states of disease—notably in rabies.

An instance of *measles*, artificially communicated from man to the dog, was reported by Dr. Squire to the Epidemiological Society of London in June, 1876. The dog had had coryza, followed by congestion of the throat and air-passages, fatal on the fourth day, from "licking the hands of a child in bed with the rash of measles at its height," the symptoms having been regarded as affording a "very conclusive proof" that the dog's disease was measles, and that it was contracted from the child.[32]

Portions of croupous and diphtheritic membranes from man having been inoculated in the dorsal muscles of a rabbit, the result in both cases was the same form of fatal diphtheritic myitis, proving the identity of *croup* and *diphtheria*.[33] Instances of inoculation of animals with the diphtheritic poison by Dr. Letzerich, of Braunfels, Nassau, and Dr. Oertel, of Munich, were given in the Reports of the Medical Officer of the Privy Council and Local Government Board in 1875.[34] The animals were infected by infiltration of their tissues with the "same sort of micrococci" as in man.

(To be concluded.)

14 Prejevalsky, vol. i., p. 130.
15 Edinburgh Courant, August 25th, 1876.
16 Science Gossip, June, 1875, p. 141; March, 1875, p. 69 (in a grey parrot); and Animal World, June, 1875, p. 94; July, 1874, p. 110 (in the parroquet).
17 Animal World, November, 1875, p. 173.
18 British Medical Journal, August 15th, 1876, p. 203.
19 Ibid., Dec. 13th, 1873, p. 697.
20 The last published paper "On Choleraisation in Animals" (THE LANCET, vol. ii. for 1866) gives reference to all the earlier ones, which date as far back as 1854.
21 Athenæum, Oct. 9th, 1875, p. 479.
22 Hartwig's "Tropical World," p. 534.
23 Montagu's "Ornithological Dictionary," p. 43.
24 Nature, Jan. 7th, 1875, p. 200.
25 Brit. Med. Jour., Dec. 13th, 1873, p. 697.
26 Ibid.
27 Nature, Nov. 29th, 1877, p. 89.
28 In Pongo's case there were evidences of former peritonitis and pericarditis, and of recent intestinal catarrh, while "the cause of death, in fact, was diarrhœa," according to another account. Vide Brit. Med. Jour., Dec. 8th, 1877, p. 819.
29 Quoted in the North British Daily Mail, Nov. 27th, 1877.
30 Animal World, Feb., 1874, p. 29.
31 Ibid., p. 30.
32 British Medical Journal, June 24th, 1876, p. 709.
33 Article on Croup and Diphtheria in Brit. and Foreign Med. Chir. Review, Jan. 1876, p. 110.
34 Vol. iii., new series, as noticed in Nature, Sept. 30th, 1875, p. 473.

A PHYSIOLOGICAL HINT TO PHOTOGRAPHERS.

BY THOMAS BUZZARD, M.D.

DISCOMFORT, amounting in many persons to actual distress, is experienced in sitting for a photographic portrait. The eye is fixed on a certain spot, and, whilst staring at this, vision becomes indistinct, surrounding objects especially being lost in a thickening mist. A feeling of giddiness, and even of faintness, is apt to follow if the sitting is at all prolonged. Whilst undergoing an ordeal of this kind a few days ago in Mr. Fradelle's studio, the idea came across me that this strain was unnecessary, and could be avoided by a simple contrivance. Having begged a piece of paper and drawn upon it a circle of about four inches in diameter, I converted this into a sort of clock-face by adding the usual roman figures in their accustomed places. The paper was then nailed to a post about eight feet distant, and when the sitting began I first fixed my eyes upon the figure XII, then upon I, II, III, and so on, "all round the clock," the gaze shifting leisurely from one figure to another. As I had anticipated, the sitting ended without any sense of strain,

mist, or giddiness having been felt; and in place of the eager longing for release usually experienced, it seemed to me that I could have sat on without effort.

As Helmholtz clearly puts it, "to *look* at anything means to place the eye in such a position that the image of the object falls on the small region of perfectly clear vision. This we may call *direct* vision, applying the term *indirect* to that exercised with the lateral parts of the retina—indeed, with all except the yellow spot." The mistiness which occurs when the gaze is long fixed in one direction appears to come up from the periphery of the field of vision. This means probably that the fatigue of the nervous element is shown first in those portions of the retina which are least highly developed, and where vision is indirect. These parts in the ordinary method of procedure are subjected to a constant strain for a period which frequently amounts to sixty or seventy seconds. By the plan which I adopted, each movement of the eye which brought a new clock-figure upon the yellow spot necessarily shifted also the position of all surrounding objects in relation to the rest of the retina, fresh points of the nervous layer being thus presented to the action of luminous rays every three or four seconds. Hence fatigue of the nervous element never had time to occur. On the other hand, the rotatory movement of the eyeball in adapting itself, step by step, to the figures upon so small a circle at such a distance was so excessively fine as to cause no interference with the photographic process. Mr. Fradelle, who has since applied the suggestion in many other cases, writes me that "the eyes are excellently well-defined, even to the iris; not alone yours, but all the pictures I have taken since have a marked superiority over those I had previously taken in the manner in which the details of the eyes are reproduced. In my opinion, the success of your idea is unqualified. I have questioned my sitters after the operation, and they express themselves as not having had any strain upon their eyes."

It is evident that the plan described is likely, incidentally, to prevent to a great extent the staring expression which the face assumes when the gaze is long fixed upon an object, for it combines a certain amount of free play of the eyes, with accuracy of photographic definition. A somewhat larger circle, I have no doubt, may be employed with even greater advantage; and printed words, pictures, or other objects, may replace the figures. For children, and others who do not easily follow directions, a disc with a single aperture towards its edge might be made to revolve, in the direction of the hands of a clock, before another disc prepared with pictured objects of some kind or other, so that one would appear at a time at short intervals of space, and attract the eye. Various other modifications, indeed, at once suggest themselves as feasible, so long always as the figure towards which the gaze is directed presents a *succession* of objects arranged in a circular form.

Grosvenor-street.

A CASE OF

TALIPES EQUINO-VARUS CURED THROUGH AN ACCIDENT.

WITH REMARKS AND SUGGESTIONS.

By JOHN McDONALD, M.B.

J. D. McD——, male, aged eleven years, was born with talipes equino-varus of both feet. His parents were willing that he should submit to an operation, but from being in a very inaccessible and remote part of the country, time passed and no steps were taken. He was always a healthy child, but did not commence walking until he was eighteen months old. When standing, the outer side of his feet rested on the ground, the soles being turned backwards, the toes pointed towards the middle line, and the heels drawn upwards. When walking, the one foot was lifted over the other in a rotatory manner.

When between the ages of four and five years, he happened one day to tread upon a small nail, which entered his left foot, just at the place where the pressure was greatest when he stood. In consequence he could not walk on the injured side of the foot, but being healthy, and active, and restless, as children generally are, he constantly endeavoured to move about, but with all his endeavours was unable to do more than reach the ground with the tips of his toes; his restlessness and desire for exercise prevented the wound from healing as rapidly as it might otherwise have done. He all this time walked on the tip-toes of the injured foot, and by the time the wound had closed the foot was so much improved that he never afterwards walked on the outside of it, as formerly, and in less than a year the deformity had nearly altogether disappeared. His parents, being persuaded that the other foot could be cured in the same manner, got him (now nearly six years of age) by promises, &c., to put the sole of his right foot to the ground. This was not an easy task for him, but being by this time aware that his foot was not like the feet of other people, he took a pride in showing that he could put his toes on the ground. This foot also improved gradually, although it took a much longer time to get better than the other. At present both feet are quite free from the deformity, except that the right tendo Achillis is still perceptibly shorter than it should be normally. I may mention that his feet are a little shorter than one would expect, and consequently look broad at the toes.

Remarks.—The above case is interesting from the fact that the cure was brought about by an accident, and not by good management or scientific treatment. While walking on tiptoe the shortened tendons and fasciæ were stretched by the weight of his body at each alternate step he made. The opposite group of tendons &c. might be looked upon as being all the time at rest, because the shortened group gained in length so much by each day's exercise that they had no purchase on the already too long tendons, and consequently the latter were never called into action.

That the wounded foot took so much less time than the other to get better shows clearly that no delay should be made in attending to the deformity; for the lower the organisation of the contracted fibrous tissues the easier they may be lengthened by stretching.

Suggestions.—The accoucheur should take charge of such a case from the birth. He should at once insist upon getting an intelligent nurse who could take care of the child until the mother might be able to look after it. He should explain the cause of the deformity, and show the nurse how to direct gentle pressure with the hand to put the contracted tendons &c. on the stretch. The nurse should change the child from hand to hand every quarter of an hour; by so doing each foot is acted upon in turn, and she eases her own hands. During the night spring boots, specially made for such cases and of the lightest description, should be used. The accoucheur should see that the nurse can put on the boots to his satisfaction. These points should be followed out faithfully for six months, and by that time the medical attendant would be in a position to say whether or not an operation would be necessary.

The advantages of such a mode of treatment over the subcutaneous section of tendons may be laid down as follows: (1) It may be given a fair trial before the time that operations are usually performed. (2) There is no risk of weakening the foot as there would be in cutting the tendons, for if the foot be not kept at rest for months after the operation all the tendons would be too long, and the foot would have too great a play at the ankle-joint. (3) The child is not likely to fret, so much treatment being begun so soon after birth. (4) The cure would probably not be more tedious than a cure after an operation at the age of six months. (5) Many parents, some from their religious views, others from a dislike to an operation, might object to surgical interference, but would gladly avail themselves of this mode of treatment. (6) This treatment having had a fair trial, and having been found unsuccessful, an operation could be performed at the usual time.

The operation is anything but severe in itself, but I have seen mismanagement with the boots cause troublesome ulcers at the seats of puncture, and I know a case where too much faith was put in the operation to the neglect of the after-treatment resulting in doing the patient no good. I am convinced that an operation will only be required in a small percentage of cases in which early and prompt attention is paid to the deformity.

Skye, N.B.

PRESENTATION.—Mr. Thomas Johnston, M.R.C.S., of Belper, has been the recipient of a very gratifying testimonial from the inhabitants of the town and neighbourhood. At a large and influential meeting of the local residents, a handsome brougham was presented to Mr. Johnston as an evidence of the esteem in which he is held by them.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

CYSTIC SARCOMA IN THE POPLITEAL SPACE; REMOVAL.

(Under the care of Mr. BELLAMY.)

IN the Mirror of March 23rd we published an interesting case of sarcomatous tumour in the popliteal space, under the care of Mr. Berkeley Hill at University College Hospital. A concurrent case has been lately under Mr. Bellamy's care at the Charing-cross Hospital. For the notes of this case we are indebted to Mr. D. Colquhoun, the surgical registrar.

K. B——, a laundress, twenty-eight years of age, married, was admitted on Feb. 5th, 1878. About six years ago she noticed a swelling in the right popliteal space, soft and fluctuating, and disappearing on flexing the limb. It gradually became solid, and she thought that within the few months preceding admission it had increased in size. About six months before admission a similar swelling began in the left popliteal space. She had never received a blow in these places, nor had she been subject to any great fatigue at any time.

On admission, there was, in the middle of the right popliteal space, a hard spherical swelling, about the size of a pigeon's egg, apparently freely movable, but having a pedicle (?) towards its upper extremity. The woman had some tingling in front of the knee-joint, and occasionally throbbing pains in the seat of the tumour. The calf of the leg was sore, as if from a kick. In the left popliteal space there was, when the leg was extended, a fluid tumour of about the same size. It disappeared during flexion, and in the front of the knee there was a feeling of cramp. Her general appearance was that of a very healthy woman. All her functions were normal, and there did not appear to be any previous history of disease in her family.

An operation was performed on Feb. 14 antiseptically. An incision was made straight down upon the mass, but as it was adherent to the integument, a clean oval sweep was made, including the skin of the entire popliteal space. A considerable amount of fluid escaped from a large cyst before the dissection was commenced, which, as in Mr. Hill's case, resulted in a direct dissection of the ham. The fascial structures were involved, but fortunately not the vessels. The mass apparently sprang from the sheath of the gastrocnemius and popliteal fascia, the former muscle being considerably involved. There was very little bleeding. The patient made a good recovery as far as the operation was concerned, and on March 20th there was no appearance of recurrence. A microscopical examination of the growth showed round and spindle cells growing from the walls of a cyst.

The tumour in the left popliteal space has not yet been interfered with. Both were probably originally hernial protrusions of the bursæ beneath the head of the gastrocnemius, or of the synovial membrane of the knee-joint.

April 15th.—The patient left the hospital without any bad symptoms, and without any indication of the return of the disease.

GENERAL HOSPITAL, NOTTINGHAM.

TWO CASES OF TYPHOID FEVER, WITH HYPERPYREXIA, TREATED WITH SALICYLATE OF SODA.

(Under the care of Dr. RANSOM.)

FOR the following notes we are indebted to Mr. W. J. Cant.

CASE 1.—J. P——, warehouseman, age thirty-six, had complained for two or three weeks of slight weariness until Friday, Nov. 2nd, 1877, when he was taken suddenly ill. He immediately went to bed, but soon became worse. On the 5th he was slightly delirious, and on the 7th more so. He was admitted into the hospital on the afternoon of Nov. 7th, being the sixth day of the fever (counting from the time he took to bed), suffering as above said. The aspect was that of a person with fever, and there was a widely diffused rash on the trunk and extremities, consisting of rose-coloured spots, slightly elevated, disappearing on firm pressure. There was in addition a streaked dusky-reddish mottling of the skin between the spots. The delirium was pronounced and of a restless character. The tongue was covered with a thick white fur. The pupils were natural. There was retention of urine, relieved by a catheter, the urine which was drawn off being dark-red in colour and slightly albuminous. Bowels moved once in the evening, the stools being of a dark-brown colour and firm in consistence (had not had a motion since previous Saturday, Nov. 3rd). At 2 P.M., soon after admission, the temperature was 104·2°. Salicylate of soda was ordered, but could not be administered just then. At 9 A.M. the medicine was commenced, twenty grains being given at first every hour per rectum. At that time the temperature was 105·4°, and the delirium was violent.

Nov. 8th.—At 9 A.M. he had had 180 grains of the salicylate, and his temperature had fallen to 98·0°, the delirium being considerably reduced, but still sufficiently evident. At 9 P.M. he had taken sixty grains more, and the temperature was 98·6°; delirium moderate yet constant. The catheter had to be used night and morning.

9th.—At 9 A.M. the temperature was 99·2°; very little delirium; milk taken freely. At 9 P.M. violently delirious; temperature 101·0°. Urine still had to be drawn off. The medicine to be taken again, fifteen grains every three hours.

10th.—At 9 A.M. temperature 100·0°; had taken only thirty grains of salicylate in the night; delirium violent; bowels moved by aid of a water enema; abdomen flaccid; some fresh spots observed.

11th.—At 9 A.M. temperature 102·6°. Had taken ninety grains of salicylate of soda in twelve hours. Delirium violent. At 9 P.M. temperature 103·4°. Had taken ninety grains of salicylate in the twelve hours. Bowels open without aid. Food taken badly. In the evening a draught of thirty grains of bromide of potassium and fifteen grains of chloral hydrate was ordered.

12th.—At 9 A.M. temperature 103·4°. Had taken ninety grains of salicylate in twelve hours. Delirium constant and violent. Refused food. Greatly weakened in muscular power. Urine passed involuntarily, and bowels moved without evidence of consciousness; stools loose. At 6 P.M. temperature 105·0°. Had taken eighty grains of salicylate in eight hours. Thus he had taken two hundred and forty grains between 9 P.M. on Nov. 7th and 9 P.M. on Nov. 8th, and in that time (twenty-four hours) the temperature had fallen from 105·0° to 98·6°. After the gradual rise of temperature, and the second exhibition of the drug, he took, between 9 P.M. of Nov. 9th and 5 P.M. of Nov. 12th (i.e., sixty-eight hours), four hundred and seventy grains of salicylate of soda without apparent benefit. The treatment was then modified, the salicylate being continued in fifteen-grain doses every three hours; he was sponged in bed with water at 65°, gradually reduced to the ordinary temperature of the supply (50° F.), for forty minutes, and then, his temperature having fallen to 101·6°, he was lightly covered with the sheet only and allowed to dry. At 8 P.M., the temperature having risen to 106·4°, the cold sponging was again resorted to for fifty minutes, and the temperature fell to 103·2°; he was again covered lightly. Several attacks of convulsions followed. At 10.30 P.M. his temperature was 107·0°, the patient being in a state of extreme exhaustion. Cold sponging again resorted to, but did not affect the temperature. At 12 o'clock the temperature was 106·4°, and at 12.45 the patient had a severe convulsion, in which he died. At the autopsy were found the characteristic lesions in the intestines of typhoid fever.

CASE 2.—C. S——, aged ten, was admitted on Sept. 10th, 1877, with acute tonsillitis, having much the aspect of diphtheria, and treated as such at the time. The temperature on admission (3 o'clock) was 101°; the urine was high-coloured and contained albumen. On the eighth day after admission she was only passing six ounces of urine in twenty-four hours, but it gradually increased to its normal amount. Her general condition slowly improved, and on Nov. 11th, the albumen having totally disappeared, she was made an out-patient. On Nov. 30th she was again admitted, with feverish symptoms and mild delirium. The urine was

loaded with albumen, and deposited granular casts and blood-cells; it gradually diminished in quantity to eighteen ounces per diem. The temperature on Nov. 12th, at 9 P.M., was 105·2°. Eight grains of salicylate of soda were given every four hours. The temperature was reduced to 101° on Dec. 5th, at 9 A.M. The dose was then reduced to four grains, but the temperature on Dec. 6th rose to 104°. On the 8th eight grains of salicylate of soda were given. On the 11th the temperature was 98·4°, and four grains of salicylate of soda were given. The temperature, however, gradually rose to 105° on the 17th, and she became slightly delirious. On the 18th she had a severe rigor, during which the temperature in the rectum was 108·4°. Soon afterwards she died.

During the attack the child had had no characteristic eruption of typhoid. The autopsy revealed the intestinal lesions of typhoid fever. Distinctly marked ulcers were present, and there was a recent perforation of one of them.

GENERAL HOSPITAL, HOBART TOWN.

INTUSSUSCEPTION OF THE BOWELS OF NINE DAYS' DURATION; DEATH.

(Under the care of Mr. B. CROWTHER.)

ON the morning of January 10th, 1878, an infant five months old was brought to the out-patient room with the following history:—Whilst out with its nurse on the 4th, it had a fall, but showed no special symptoms except restlessness until the 7th, when blood (dark) passed from the bowels on two or three occasions. About this time also sickness came on. On the 10th the child was seen for the first time. The mother stated that it had lost flesh rapidly, was continually sick, but no more blood or other motion of the bowels had occurred. The child was pale, the eyes sunken; pulse 110; abdomen slightly distended; but no tumour could be felt. The infant dozed off for short intervals, then awoke, moaned piteously, and drew up its legs. Ordered a carminative mixture, and to have a mustard-bath at night. Lime-water was also to be taken with the milk. On the 12th it was worse, vomiting was constant, and there had been no motion of the bowels since the 7th. On examination, the abdomen was found much distended, tympanitic, and encroached on chest. Breathing thoracic, 50; pulse 120. Intussusception of the bowel was suspected, and an anal exploration made. Some very thick, viscid, inspissated, offensive blood was found, quite occluding the rectum, and was with difficulty removed with warm-water injections. The finger passed freely to the sigmoid flexure, but no tumour or any other peculiarity was found. Injections of water, and after that air, were tried, but only small quantities of either could be retained, and were expelled with force. Difficulty also was experienced in introducing the tube more than four inches. To continue the lime-water and milk, and also mustard-bath at night.

On the 13th the mother thought the child was better, and stated that it had passed a good motion (but dark) since the injection, and that the sickness was not so urgent. On the 15th the child died at 3.30 A.M. There had been no motion of the bowels except the last-mentioned; sickness and quick breathing being much worse all day on the 14th.

Post-mortem examination, made at 12 A.M. on the 15th showed the body to be wasted, the limbs flaccid, the eyes sunken, and the abdomen much distended and tympanitic, the chest being pushed up and rendered prominent. On opening the abdomen, large coils of ileum were seen to principally occupy the cavity. The cæcum and ascending colon were displaced, so that they occupied the epigastric and umbilical regions. Some six inches of ileum (commencing at the junction with the colon) were found to be invaginated and strangulated within the cæcum and ascending colon, forming together a tumour two inches and a half square, hard, and darker in appearance than the surrounding intestines. The strangulated ileum was with some little difficulty extricated from within the colon; and about its middle was found a dark greenish-black gangrenous patch, which had opened the bowel transversely to the extent of half its calibre, some bloody and offensive discharge exuding. The cæcal appendix was found near to where the ileum had entered the cæcum. The rest of the colon was remarkably collapsed and free from any contents, and hardly admitted a crow-quill. Lines of congestion were found where the intestinal coils touched one another.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Paralysis of the Posterior Crico-arytenoid Muscles.—Electrolytic Treatment of Epulis.—Plantar Bunion.

THE ordinary meeting of this Society was held on the 12th inst., Mr. Callender, President, in the chair. An interesting communication was made by Dr. Felix Sémon on a case of bilateral paralysis of the posterior crico-arytenoid muscles, the patient being shown to the Society. The subjects of electrolysis in the treatment of new growths, and the causation of plantar bunion and "hammer toes," were raised in papers by Mr. Nunn.

Dr. FELIX SÉMON read a paper "On a Case of Bilateral Paralysis of the Posterior Crico-arytenoid Muscles." He said that the larger size of the glottis in the living than in the dead subject was due to the expanding force of the posterior crico-arytenoid muscles. In cases of paralysis of these muscles the glottis is reduced at first to the size found after death—the so-called "cadaveric" position of the vocal cords. Later on, however, the narrowing is still more developed in consequence of the secondary "paralytic contraction" of the antagonists of the palsied muscles. Finally the glottis is reduced to a mere linear slit, the vocal cords nearly touching each other. As a result there is dyspnœa, so characteristic that even without the aid of the laryngoscope the condition may be diagnosed with great probability. Its peculiarity consists in the fact that it is *exclusively* an inspiratory one, while expiration is effected without difficulty, and the voice remains quite unimpaired. Time not allowing him to enter into full physiological details, he could only say that the complete freedom of expiration which existed, even when the inspiratory dyspnœa had led to very grave changes in the circulation and other secondary symptoms, was most remarkable, and wanted some better explanation than could be given at the present time. The patient, a railway inspector, aged thirty-two, enjoyed good health till two years ago. Having been subject to several severe colds, he was one day seized with an attack of violent cough, followed by slight dyspnœa. Although the symptom disappeared quickly at that time, it has since then appeared more and more frequently. At the present time the breathing is somewhat impaired permanently. Cough, with consequent deep inspiration, is sure to bring on a more or less severe attack of dyspnœa. Lately some other symptoms have appeared. The patient is drowsy; he complains of weakness, itching, numbness, and fibrillar convulsions in both legs, especially in the left, and sometimes of slight incontinence of urine. The patient was then introduced, and Dr. Sémon showed that there was slight ptosis of the left eyelid. The left pupil was smaller than the right; the left naso-labial fold more distinctly visible than the right, and the left oral angle a little lower than the right. His gait was also uncertain. The laryngeal symptoms were also demonstrated (permanent slight inspiratory dyspnœa, which was much increased when the patient was told to cough, easy expiration, and unimpaired voice), and Dr. Sémon described the laryngoscopic appearance of the glottis (rima glottidis much smaller than normal; complete approximation of the vocal cords during phonation; if deep inspiration be attempted the cords separate only a very little from each other, and return at once to their former close approximation. The act of separation is effected, not by a continuous movement, but by several oscillations). This condition was illustrated by drawings, and shown after the meeting laryngoscopically to the members of the Society. This case was the sixth observed within the past two years by Dr. Sémon at the Hospital for Diseases of the Throat. All the patients were men, between thirty and sixty, and, with one

exception, they had suffered between three months and two years before coming to the hospital. The exception occurred in a case of undoubted functional paralysis of the posterior crico-arytenoids, similar to the functional paralysis of the adductors of the vocal cord so often seen in hysterical women. There was generally no serious difficulty in distinguishing between this disease and spasm of the glottis; but it was, in some cases, quite impossible to make during life a differential diagnosis between paralysis of the posterior crico-arytenoids and anchylosis of both arytenoid cartilages. With regard to etiology, one of the six cases resulted from functional disorder, one from compression of both recurrent nerves by firm connective tissue (proved on post-mortem examination), two from catarrhal influences, and one from perichondritis (proved post mortem). The case then shown was of interest in this respect. He (Dr. Sémon) had looked upon the other nervous symptoms, above mentioned, as a very interesting but merely accidental coincidence, for the long time which had elapsed between the onset of the paralysis and that of the other symptoms, as well as the integrity of the other organs supplied by the pneumogastric nerve, seemed to show that there was no organic connexion between the two groups of symptoms. But Dr. Hughlings Jackson, who had seen the case, thought that there was no doubt that the paralysis was due to central disorder, probably to a wasting process in the medulla oblongata. One case of this kind had lately been described by Penzolat. Prognosis seemed to be favourable in cases of functional paralysis, in all others it was at least doubtful. With regard to treatment, Dr. Sémon said that functional paralysis does not require other than constitutional treatment. Owing to the complete failure of all other remedies experienced here and abroad in recent cases of purely neuropathic character, the direct application of electricity to the paralysed muscles might be tried, although all observers agree that it is not so useful as in other paralyses. No percutaneous application should be tried, inasmuch as the irritation of the healthy fibres of the vagus supplying the antagonists would lead simply to stronger contraction of these and still more marked narrowing of the glottis. In accordance with all other observers, Dr. Sémon urgently recommended in all the more developed cases the early performance of tracheotomy. Even the small number of observations hitherto made showed that, owing to the gradual carbonisation of the blood, the chances of recovery after the operation are less the longer it is postponed. If performed in time, it will not only save the patient's life, but will also restore him to health, with the only disagreeable modification that in all probability he will have to wear his tube for ever. In conclusion, Dr. Sémon thanked Mr. Callender, Dr. Hughlings Jackson, Dr. M. Mackenzie, and Dr. De Havilland Hall, for their valuable advice.—The PRESIDENT said that, granting that the disease exists, it was more easy to understand it to have a local than a central origin. It seemed difficult to understand that so complex a nerve as the vagus could have its fibres so differentiated that a few only were materially altered by central disease.—Dr. D. POWELL thought the case would throw light upon the cause of dyspnœa in cases of pressure causing paralysis of the laryngeal muscles. The dyspnœa was clearly inspiratory, and he would suggest that it was due to the atmospheric pressure sucking the cords together, as he had himself noticed in a case of pressure on the recurrent nerves. It was surprising that the patient had no pulmonary signs. It would go hard with him if catarrh supervened; and Dr. Powell asked Dr. Sémon whether he contemplated an early operation to avert such an untoward result. — Dr. SÉMON said, in one case examined post mortem there was chronic pneumonia; in another, the lungs were only slightly congested. Nor in the literature of the subject was any mention made of disease of the lungs. He concurred that operative measures should be had recourse to as early as possible.

Mr. NUNN read notes of cases of Epulis treated by Electrolysis. He remarked that this mode of treatment was peculiarly applicable to epulis, where ordinary operative measures are frequently more or less complicated, and attended with considerable hæmorrhage. The first case was that of a lady in whom a sensitive and vascular growth, the size of half a walnut, prevented the adaptation of artificial teeth. The patient declining any operation by the knife, the electrolytic treatment was carried out. There were about twenty sittings; six or three cells were used. The tendency to bleed diminished with the progress of the treatment. The pain caused by the current was in proportion to the number of cells employed; it was unbearable when bone or periosteum were touched by the needles, and it ceased immediately on their withdrawal. An injection of chloride of zinc produced intense pain and subsequent irritation. The patient was enabled to wear the artificial teeth after the treatment. Case 2 was one in which an epulis occurred in the upper jaw after removal from the lower jaw. Electrolysis, at thirty-two sittings, caused diminution of growth sufficient to enable artificial teeth to be worn. Case 3, a lady fifty-three years of age, under the care of Dr. McOscar with a soft vascular tumour growing from the alveolus o the last molar tooth, and extending over the hard palate. The electrolytic treatment was steadily pursued for eight months, and Mr. Nunn showed casts representing the progress of the case, all that now remains being a small indurated and painless mass. Mr. Nunn lastly referred to a fourth case, now under treatment at the Middlesex Hospital. He advocated electrolysis in these cases mainly on the grounds of its painlessness, ready applicability, and freedom from hæmorrhage. The cells employed contained manganous oxide and iron, chloride of ammonium being the exciting fluid. The electrodes should be of gilded steel, or of platinum.—The PRESIDENT said the communication raised the important question of electrolytic treatment in general.—Mr. MAUNDER said that the subject of electrolysis of tumours was well worthy of consideration. Unfortunately the process appeared to be both painful and very tedious, and he thought the choice of the method of operation, whether as above described or by the knife and bone forceps, must be left to the determination of the patient. His own experience in the surgery of the jaws, now somewhat extensive, had taught him that hæmorrhage in operations for epulis need not be considered in the decision, supposing the tumour to be cut out, as it ought to be, and not cut into. — Mr. H. MARSH had made frequent trials of electrolysis in cases of nævus, and had been much disappointed at the results. It was a tedious and not very satisfactory mode of treatment. — Mr. PUGIN THORNTON referred to electrolysis in the treatment of nasal polypi. Here, again, in his experience, the plan was extremely tedious.—Mr. GOLDING-BIRD said there were two ways in which electrolysis might be applied. The first was in the use of electrodes, which themselves undergo no action. This he had tried on nævi, and found no result except on the surface, and then but little else beyond what the mere puncture alone would have done. If, however, the electrodes were decomposable, then a caustic action was set up; and he was in the habit of using electrodes of zinc and of silver, so that chloride of zinc was formed by the separation of the chlorine from the blood. He referred for fuller details to his paper in THE LANCET (1877, vol. i., p. 564).—Dr. ALTHAUS thought that some of the disappointment in the results was due to want of appreciation of the modes of application. To ensure success, both poles should be introduced into the tumour, the positive pole being always decomposed by the current. He had seen some thirty or forty cases of nævus nearly all successfully treated by this method, and he had used it with good results in naso-pharyngeal polypus and in bronchocele. In one case of solid hypertrophy of the thyroid gland, with considerable obstruction to swallowing and breathing, electrolysis was employed as a last resort, Sir W. Fergusson declining to remove the growth with the knife. In a few months the tumour had almost disappeared.—Mr. GOLDING-BIRD was aware of the importance of inserting both poles into the tumour; he had only pointed out that advantage should be taken of the caustic effect produced by changes in the positive pole.—Mr. MARSH said in all his cases both poles were inserted.—Mr. NUNN, in reply, said that he had found electrolysis very successful in treatment of nævi, and he related a case in point in which, after two or three years' treatment (both poles being inserted), a large nævus on the forearm of a young lady was reduced to a mere white mark. If chloride of zinc were wanted, it might be applied without the intermediation of electrolysis. Its injection in his first case read caused great pain. He was sure that no cutting operation could have been carried out in that case without troublesome hæmorrhage.

The PRESIDENT mentioned that Mr. Hutchinson had sent to the meeting a living subject of Psoriasis partially treated by chrysophanic acid. One half of the body had been treated with tar ointment and the other half with chrysophanic acid, the result being that the latter half was cured, whilst the eruption remained on the other side.

Mr. NUNN also read a short paper on Plantar Bunion. He showed casts of the feet of two patients suffering from different forms of disease. In the one there was a suppurating bursa over the heads of the third and fourth metatarsal bones, and retraction of the phalanges of the outer toes; and in the other similar backward displacement of the toes, but not any inflammatory mischief. In the first case, that of a man thirty-nine years of age, the displacement of the toes had caused him to walk on the heads of the metatarsal bones, and a plantar bunion ensued, which suppurated. In one case Mr. Nunn had to perform Syme's amputation, in consequence of a suppurating bunion, and some time afterwards the patient reappeared with similar disease in the other foot. The point he wished to insist on was that the condition known as "hammer toes" disposed to the formation of bunion, since where it exists the normal rolling action of the foot in walking ceases at the heads of the metatarsal bones instead of at the tips of the toes. The other case threw light, he thought, upon the mode of production of this deformity ("hammer toe"). The patient was a lady, who in 1872, after a severe attack of gastro-enteritis, began to suffer from neuralgia and pains in the back, and by January, 1873, there was marked lordosis established, reducing her height by four inches. She became also lame, chiefly in the right foot; the right leg was wasted, and there was retraction of the toes of the right foot. Spinal support, shampooing, faradaism, and tonics, were followed by marked improvement as regards the spinal condition, but the toes remained retracted. Mr. Nunn contrasted this condition of the toes with the effects produced by paralysis of the interossei muscles of the hand, as first pointed out by Duchenne; and he showed photographs in which division of the ulnar nerve had led to palsy of these muscles. In the second case he had read might not the retraction of the toes been produced by the change in the spinal column stretching the cord or nerves? The wasting of other muscles in the limb was confirmatory of this view. In the first case there was no obvious spinal derangement, but he would suggest that in this, as in the majority of the cases of "hammer-toe," which are not developed till puberty, the rapid change in length of the spine at that period may so disturb the functions of the cord as to produce paralysis of the interossei muscles, and often other conditions, such as flat-foot, talipes, &c.—The PRESIDENT pointed out that the atrophy of the muscles in these cases was a great bar to successful treatment. All must know of cases of talipes in which the deformity has relapsed after the tendons have been divided.—Mr. MAUNDER thought the paper suggestive, but somewhat alarming, and he trusted that in a very large majority of cases of hammer toe Mr. Nunn's pathology would prove to be incorrect, especially as he (Mr. Maunder) had operated upon four contracted toes in the persons of three young relatives with the happiest results, dividing the flexor tendons. These children's aptitude for play was remarkable. If Mr. Nunn meant to imply, by speaking of the toes as extended, that the extensor tendons should be divided to remedy the deformity, Mr. Maunder was sure that such an operation would be a failure. The explanation of plantar bunion offered was certainly reasonable.—Mr. BENNETT asked if any observations had been made on the sensation of the limb. He had found in cases of suppurative bunion of the sole of the foot considerable diminution and even loss of sensation; and in one case, after Syme's amputation had been performed, a painful stump remained, with loss of sensation to the knee. The patient was robust, about thirty-three years of age, and bore no evidence of spinal disease.—The PRESIDENT drew Mr. Nunn's attention to the "perforating ulcer of the foot" described by French writers, and so little known in this country, which appeared to him possibly to be only an extreme degree of the suppurating bunion.—Mr. G. BROWN related particulars of a case of suppurating bunion leading to ulceration in the sole of the foot, and necrosis. In this case the opposite foot became similarly affected from the patient having to bear all his weight on it. Amputation was not had recourse to.—Mr. B. ROTH mentioned that a useful detail in preventing deformities of toes was to make the child wear stockings with toes. The Japanese have worn such stockings for generations past.—Mr. NUNN, in reply, said he thought the "perforating ulcer" of the French was different from suppurating bunion. In his view, the interossei being extensors and paralysed, there would be undue contraction of the flexors, and therefore he would agree with Mr. Maunder as to division of the flexor tendons.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1878.

THURSDAY, APRIL 11TH.

THE Council reassembled at 2 o'clock, Dr. Acland in the chair.

The debate on Dr. Humphry's motion was continued by

Dr. ROLLESTON, who said Lord Ripon's Bill afforded a confirmation of the view that if the Council did not deal with the question of conjoint boards the Government was very likely to do so. It would, however, be incomparably better for the Council to do it themselves than to be put under the steam-roller of Government interference. What the State had done for soldiers and sailors it would undoubtedly have done for the public generally. He hoped that the Council would not go back from itself, for though the present Government might deal mildly with them, another and a stronger Government might chastise them with scorpions. He would not for a moment seriously entertain the objection that a thousand candidates could not be examined by one board in the course of the year. He was sure that Dr. Storrar, who represented the London University, the greatest examining board in the world, would not say that it was impossible to secure uniformity of examination for that number of students.

Sir D. CORRIGAN rose to order. Dr. Rolleston was making a second speech which he was not entitled to do by the rules of debate. If he had moved the adjournment last evening he ought not to have made a speech then; but having made a speech then, he ought not to have done so now.

The PRESIDENT ruled that Dr. Rolleston had been in order. His speech was not concluded last evening when the hour for adjournment arrived.

Mr. TEALE said he had not been convinced by Dr. Wood's eloquent speech that Scotland ought to be allowed to continue its present mode of examinations. If Scotland only had to be considered, the satisfaction of the Scottish members with the present state of affairs might be expected, but since the privileges of Scotch licences had been extended to the other divisions of the kingdom, the question must be decided with reference to the requirements of the other two divisions. The mere fact that Scotland was satisfied with its own examinations was not sufficient to prevent what the majority of the representatives from England thought necessary. The Medical Council had arrived at a very critical period in its history. For years it had been working at registration and education. The Register was in a tolerably favourable condition, but the work that had to be done with reference to registration might be done by a much smaller and less expensive body. Could it, however, be said that the work that had been done in the matter of medical education was satisfactory? There could be no doubt that the popular feeling was that the Council had not had that effect on medical education which it was expected to have. The Bill proposed to give the Council considerably enlarged powers, but what would be the use of those powers if their efforts were to be frittered away in supervising nineteen examinations? The disappointment felt in the country was almost universal that the Bill did not secure what the medical profession had been looking for for the last twenty years, a single entrance examination for each division of the kingdom. He could not share in the fears that it would reduce the character of the examinations to a low dead level. It would be the business of the Council to see that the examinations did not fall too low nor rise too high. It would be a great boon to Oxford if they were relieved from the obligation to examine students for the qualification to practise. The present plan was a tremendous waste of power, and he felt convinced that unless some such plan as that proposed by Dr. Humphry's motion were carried out the hours of the Medical Council as a council were numbered. It would decline in reputation, and eventually the public would declare that it was of very little use, and when the strong Government to which Dr. Rolleston had referred came into office it would be entirely swept away.

Dr. STORRAR said the London University would certainly not have any difficulty in examining 1000 students a year. Sir James Paget had told him that he himself examined annually at the Royal College of Surgeons of England 500 for the primary, and about 300 for the final examination. Dr. Andrew Wood must have been much pushed for an argument when he advanced that as a difficulty. He cordially supported Dr. Humphry's motion and all the arguments which had been adduced in its favour. He was strongly opposed to the principle contained in Clause 14 of the Duke of Richmond's Bill. That Bill was brought under the notice of the University of London, and referred to a committee, consisting of all the medical and legal members of the University. That committee had drawn up a report, but as it had not yet been presented to the Senate, it could not fairly be brought forward as a document expressing the mind of the University, though he had no doubt it would receive the approval of the Senate. He was inclined to concur in the view expressed by Dr. Rolleston, that if the Council did not move in the direction indicated by Lord Ripon's Bill, the probability was that the Government would step in and do it for them. He was exceedingly surprised to hear Dr. Wood state that the examining bodies in Scotland had been the first to avail themselves of the clause in the Act which enabled them to set up conjoint boards, for the plan adopted in Scotland, instead of consolidating seven examinations into one, really increased the seven to nine. Dr. Wood would lead the Council to suppose that the Scotch examinations were so good that it was not desirable to interfere with them, but the information which he himself had received did not lead him to the same conclusion. The London University had taken a view of the question beyond the area of their own interests, and had considered not only what would be beneficial for the medical profession, but for the public at large, and had given their best assistance to establish conjoint examinations for the common good of the empire; but they would certainly resist to the utmost any such attempt to overrule their powers as was represented by the 14th clause of the Duke of Richmond's Bill. The effect of the clause would be the setting aside of the functions of the medical faculties of all the universities in Great Britain.

Dr. HALDANE said the idea of a conjoint scheme was no doubt at first very seductive, but things were in a very different condition now from what they were formerly. For the last six or seven years attempts had been made to bring such a scheme into practical working, but the success had not been very great. Even in England it had not yet been tested by experience, and, at the present moment, it was entirely in the realm of theory. Only about 14 per cent. of those who obtained qualifications in England obtained them at the universities; whereas in Scotland, while 307 qualifications were granted last year by the corporations, 305 were granted by the universities. This showed the great difference between the position of the Scotch universities and the position of the English universities. Although it had been found impossible in Scotland to form a conjoint scheme for all the bodies, a successful attempt had been made to unite the corporations, and the result had been that a very large number of students annually came forward to obtain the double qualification. Previous to the establishment of these double qualifications the College of Surgeons in Edinburgh annually granted seventy or eighty single qualifications, whereas last year they only granted twenty-five. He did not consider it desirable that universities and corporations should be amalgamated together in the construction of a conjoint scheme. The functions of universities were essentially different from those of corporations. A university degree should be something much higher than the mere qualification of a corporation. The English universities were not great centres of medical teaching, but in Scotland the case was entirely different. The Scotch examinations had been tested on their merits by the visitors from the Medical Council, and the reports were, on the whole, very satisfactory, as also were the returns of the Army Medical Board. He did not see how the conjoint scheme would improve the examinations, because the same men would be the examiners. When things were going on so well, and when the different bodies were gradually raising the character of their curriculum, it was a great pity to interfere with them. Dr. Rolleston had threatened them with the operation of a *Staats examen*. For his own part he was not the least afraid of a *Staats examen*, and would infinitely prefer it to a conjoint board.

Dr. QUAIN said, previous to 1858 English students continually went to Scotland to get their qualifications by a less expenditure of brain power and pocket power than would have been necessary to obtain qualifications in England, but what was now desired was to secure uniformity and completeness, so that whether a man obtained his qualification in England, Scotland, or Ireland, he should be equally qualified to practise. The Government, the Medical Council, and the medical profession had all asked for something like the proposed conjoint scheme. Dr. Haldane had approved of the *Staats examen*, but why should a man who had been examined by a university or a corporation have to undergo a second examination? The Conjoint Board scheme was a far simpler thing than was often imagined, and would be very easily carried out. The delay in England had arisen from a desire to make the scheme complete, and from the difficulty of getting the different bodies to yield. The College of Surgeons was saddled with the enormous expense of keeping up a national museum, and the London University had given up its Act of Parliament simply for the public good in order to join in the proposed conjoint board. The scheme was now complete, and only needed a few verbal corrections, and his opinion was that no better scheme of examination had ever been produced. The Government would never sanction that the Council should consider the interests of this or that body rather than the public interest.

Mr. TURNER considered that the course that was being pursued of discussing an abstract resolution was not treating the Duke of Richmond with the courtesy which he deserved. It was an attempt to force the hand of the Council—to commit them to an abstract proposition before considering the Bill. The motion said nothing whatever as to how the examining board was to be constituted, and if it was passed the Duke of Richmond would be at liberty to interpret it in many different ways. The two great reasons advanced by Dr. Humphry in favour of conjoint boards were that the present system was anomalous, and that the conjoint scheme would ensure uniformity in the standard of examination. He was quite aware that a great deal might be said as to the anomaly of having nineteen separate bodies, but the question must be looked at in its historical aspects. Many of those bodies were of great antiquity, and had shown themselves to be progressive institutions. Why, then, should their progress be summarily stopped? Dr. Storrar had insinuated, on the evidence of certain unknown persons, that some of the Scotch bodies were not up to the mark, but against that might be placed the reports of the visitors, who did not throw any such reflections on the Scotch bodies. If those bodies did not perform their duty the Council had the power, under the present Medical Act, of compelling them to do so. Dr. Humphry considered that the formation of conjoint boards would make the standard of examination uniform. He did not think it was desirable to have a uniform examination, and, even if it were desirable to have uniformity, could it be secured? Uniformity of examination was a phantom. It could not be bottled up as the standards of weights and measures were preserved. Every examiner had his own standard, and even that standard varied according to circumstances. If a man was suffering from a fit of dyspepsia his standard of examination would be somewhat different from what it would be when he was in the full exercise of his digestive powers. A candidate's knowledge could not be weighed out as tea and sugar. If it was wished to get the nearest approach possible to uniformity all the students should be examined by one examiner.

Mr. SIMON.—Who must be always in the same state of health. (Laughter.)

Mr. TURNER said it must be so, and in such a case he pitied the examiner. By the English scheme it was proposed to have eight examiners constantly at work, so that there would still be diversity. Another objection to the conjoint scheme was that it would introduce the system of centralisation into the examinations, and that would be a great encouragement to cramming, and interfere most materially with the legitimate progress of medical knowledge and study. Students would prepare themselves for such an examination to the neglect of their other studies. Nearly all those who were intimately concerned in the higher education of students had pronounced a very decided opinion against the system of centralisation. By concentrating their attention on the examination by the Conjoint Board, the students would omit to study those subjects which the higher examinations of a university would impose upon them. The examining talent of the kingdom was

already employed by the licensing authorities, and the Conjoint Board would simply have to employ the same men, who would be imbued with the same ideas as at present. Another argument against the Conjoint Board was that so many students would have to be examined that men engaged in active practice would not be able to afford the necessary time, and thus the examination would fall into the hands of those who were not thoroughly qualified to conduct it. It had been suggested that the questions and answers might be sent by post, but until the telephone had attained a greater pitch of perfection, it would be impossible to carry out the oral examinations unless the candidates and examiners were brought face to face. It was proposed to make the conjoint examinations compulsory, but compulsion was not according to the spirit of modern legislation. On these national grounds he altogether objected to Dr. Humphry's motion; but there were also certain local objections to it. The Scotch universities had within and around them great medical schools, and were great training institutions for students of medicine. The number of students in and about the Scotch universities was not far short of 2000, while the Oxford, London, and Durham Universities had no medical schools, and the school at Cambridge had only about fifty students. The Scotch universities therefore protested against their students, who had a full course of study, and a complete examination, being required to undergo the minimum examination of a Conjoint Board. What had the Universities of Scotland done that their graduates should be fined in this way? Under the present system of diversity, able men would aspire to the higher qualifications, but if the minimum examination placed a man on the Register, many students would stop at the minimum, and in that way the compulsory conjoint scheme would be most injurious. Another difference between the Scotch and the English universities was that the former were comparatively poor institutions. They do not draw on the public purse like the London University. The Treasury was extremely jealous about giving anything to Scotland. Ireland was far more fortunate in this respect. (Laughter.) The examination fees constituted a very important part of the revenues of the Scotch universities, but those fees did not go into the pockets of the examiners. They formed part of the general fund of the universities. The University of Edinburgh received something like £3000 a year for medical examinations, but the medical examiners only received £350 of that amount, and even that went to non-professorial examiners associated with the professors. The whole profession benefited by the fees, because the sum so received was employed in improving the facilities for teaching. It was because the Scotch representatives felt that the fees would be diminished, that the number of their candidates would be very materially reduced, and that therefore so much money would not be available for the improvement of instruction, that they protested so urgently against anything like a compulsory conjoint examining board.

Dr. A. SMITH said he had always been opposed to the conjoint scheme, and nothing that he had heard in this discussion had induced him to change his views. The Council was very much indebted to Mr. Turner for so lucidly exposing the attempt which had been made by Dr. Humphry's resolution to place them in a false position. He was perfectly convinced that the Conjoint Board scheme would tend to discourage young men from aspiring to higher qualifications. A large majority of those who entered the medical profession in Ireland were quite content to settle down in the country as dispensers or with an appointment in a poor-house, but though the curriculum of study at the Dublin University had been greatly improved of late years, the number of candidates for degrees was increasing every year. His opinion was that it was derogatory to a university to condescend to a union with the corporate bodies in a conjoint scheme. One of the most important provisions in the Duke of Richmond's Bill was that which would prevent any man getting on the Register without a double qualification. Four or five years ago THE LANCET published a very elaborate analysis of the practitioners on the Register, and it appeared that, so far as England was concerned, there were 4000 licentiates of the Royal College of Surgeons, not one of whom had ever been asked a question on the practice of medicine.

Mr. MACNAMARA said he did not think the time of the Council had been wasted by this discussion, for if Dr. Humphry's motion were passed it would be tantamount, so far as the Council was concerned, to suppressing altogether the Lord President's Bill, the very backbone of which, as expressed in Clause 3, was the necessity of a double qualification for registration. He believed that if the alternative of a double qualification, suggested by the Duke of Richmond's Bill, had been before the Council years ago they would never have approved of the conjoint scheme. He was one of those who considered that the conjoint scheme would have a lowering tendency. Certain bodies were now trying to establish a hybrid degree—to examine on medicine, surgery, and other subjects higgledy-piggledy; but the system of the double qualification would ensure that all who were licensed had proved their fitness both in medicine and surgery. He had formerly found fault with the Scotch examinations but he now wished to make the *amende honorable*, and to say that, as the result of inquiries he had made, and of the visitations that had taken place, he felt certain that the disparity which formerly existed had disappeared. Years ago, when he was a "grinder," he showed his estimate of the examinations in the three countries by charging twenty guineas for preparing a man for the College of Surgeons in Ireland, fifteen guineas for the College of Surgeons in England, and ten guineas for the College of Surgeons in Scotland. (Laughter.) He had lately inquired among his Dublin friends, and he found that the fees were the same all round. After Dr. Humphry had spoken he telegraphed to Dublin, and the reply he received was that, in 1877, the number of students examined for the first half was 109, of whom 56 were rejected; and for the second half 132, of whom 34 were rejected. The adoption of the resolution would be the destruction of the Lord President's Bill, and the Council should rather set itself to consider the Bill clause by clause, so as to point out to the Duke of Richmond what were its chief faults.

Sir W. GULL said the Scotch representatives had appealed to the Council to maintain in their full present efficiency the medical bodies in Scotland, because they were ancient and historical; but surely historical associations were no ground for perpetuating an evil. At present all the Scotch bodies were teaching down to a minimum, or they would not pass so many students.

Mr. TURNER.—No, no.

Sir W. GULL said the relative numbers of candidates at the London universities and at the Scotch universities proved that in the former case the examination was at a maximum, and in the latter at a minimum. If, however, there was a conjoint minimum examination, the examinations at the universities would be advanced. The universities must either be reduced to the minimum qualification for the Register, or must be set free from examining for the Register. The Council had nothing to do with political or monetary questions. Their duty was to secure the greatest good for the profession and the public, and that would be obtained by putting what he might term the guinea-stamp of a conjoint examination on a man. If, in addition, he wished for a higher distinction, he might strive to obtain it from one of the bodies. It had been said that students would not go further than the minimum examination. Was that the experience of human nature in Ireland and Scotland? Depend upon it great numbers would not be satisfied with merely obtaining the minimum qualification. He hoped the Council would strengthen the hands of the Government to overcome the political pressure which had been placed upon them, and the passing of Dr. Humphry's resolution would have that effect.

Dr. PITMAN said that Dr. Andrew Wood, while objecting to Conjoint Boards, had claimed for Scotland that there was a conjoint scheme at present in operation there. But the truth was, it was a very different thing from what was commonly meant by a conjoint scheme, and each of the bodies combining reserved the right to grant single qualifications. What was wanted was uniformity of examination, and the only way of securing that was by having one board for each division of the kingdom.

On the motion of Mr. SIMON, the debate was adjourned.

Dr. WOOD moved that the Army Medical Returns be inserted on the Minutes, and that the best thanks of the Council be given to the Director-General of the Medical Department for his courtesy in sending them.

The motion was seconded by Dr. A. SMITH and agreed to, and the Council then adjourned.

FRIDAY, APRIL 12TH.

The Council reassembled at 2 o'clock, Dr. Acland in the chair.

Mr. BRADFORD stated that the Society of Apothecaries

were preparing a document very similar to that which had been presented by the Royal College of Surgeons on the subject of the Duke of Richmond's Bill. He hoped to be able to lay it before the Council on Saturday.

Sir D. CORRIGAN, in asking a question concerning the conjoint scheme in England, stated "that it would be desirable to have the latest information as to the present state of the conjoint scheme in England, and that with this view the President be requested to furnish the Council, if in his power, with such information."

Sir JAMES PAGET said the conjoint scheme was in the same position as at the last meeting of the Council, but a Committee of Reference had been appointed to prepare regulations for examination. Those regulations had practically been completed, and probably another meeting of the Committee would suffice to correct a few errors. Before they were published it would be necessary to offer them to the several medical authorities for confirmation, but there was no reason to doubt that all the particulars would be accepted by the authorities and confirmed. There could be no doubt that the English conjoint scheme might be brought into operation before next October, but whether it would be thought right to do so would depend upon the decision at which the Council arrived with regard to the Duke of Richmond's Bill. The College of Physicians had indicated their opinion that the passing of that Bill would compel the English authorities to abandon the scheme.

The debate on Dr. Humphry's resolution was then continued by

Mr. SIMON, who referred to several of the objections that had been taken to the general principle of the motion. The real question before the Council was—What was the object of the Medical Act as affecting the institution of the Council? It was to provide a guarantee that none but properly qualified persons should be able to call themselves legally qualified practitioners, and that the standard of that qualification should be as high as the circumstances of the time permitted. The purpose of this debate was to ascertain if that guarantee could be given in such a way as the public had a right to demand, under a system of multiple competing examining bodies, and his answer unhesitatingly was, that it could not. The tendency of such a system must be to favour that which paid best against that which did not pay; or, in other words, to compete downwards in facilities and temptations to the candidate. Granted that there had been improvement under the influence of this Council, the chief improvements had taken place under pressure, and there would be no security that the exertions that had taken place would be continued if the pressure were withdrawn. Mr. Turner had argued that uniformity of standard was a phantom, but such an argument was not quite worthy of the philosophical city from which he came. The great objection, however, appeared to be that the effect of the conjoint scheme would not be beneficial to the Scotch universities and corporations; but the question must not be considered as exclusively affecting local or personal interests. The relation of the particular bodies to the conjoint scheme was, of course, to be settled under the scheme, and, in framing the regulations, attention would be paid to what were the distinctive characteristics of the institutions. It had been said that it would be injurious to amalgamate the universities and the corporations, but it seemed to him that the minimum qualification might be so arranged as to allow the universities and corporations to retain what was distinctive. The principle of Lord Ripon's Bill was to provide for the minimum qualification being so regulated that it should and could not be obtained below a certain standard, and be increased in stringency from time to time as circumstances required. If the resolution were carried he hoped that the authorities would see how advantageous it would be to provide that there should be only one legal title in respect to the minimum qualification.

Sir JAMES PAGET was afraid it might be considered by the public that the opinion of the Council was that the Duke of Richmond's Bill was altogether unfit for passing. That was not the view which the Council took, for many members felt that, notwithstanding the necessity for certain amendments, there yet remained in the Bill a great deal which it was for the general advantage of the profession and the public should pass. They were all agreed as to the necessity for a double qualification, and the other point which the Bill sought was that there should be examination rules for securing uniformity of examination for qualifications. However much they might discuss the methods by which uniformity might be achieved, there could not be a doubt that that was what was looked forward to as the advantage to be gained by a minimum qualification. The public seemed to have a natural instinct with regard to the necessity of having a uniform qualification. The Universities of Oxford, Cambridge, and Durham complained that, while they wished to raise their examinations to the highest point, they were under compulsion to pass a man who did not rise to that standard, because they could not fairly say he was unfit for practice. If the University of Edinburgh professed to have a higher standard of qualification, then they convicted those who had a lower standard of doing wrong. What should follow? That the higher should combine with the lower, and lift them up, and that was simply a conjoint examination. Whether the Council wished for conjoint examinations or not, the public would have it in some form or other, as their natural instinct told them it was necessary for their safety, and some uniform standard would be insisted on below which no medical practitioner would be allowed to be registered. The British Medical Association had obtained the unanimous vote of thousands of members of the profession in favour of the conjoint scheme, and for years past the English authorities had done their best to bring it into operation. Their delay had been scoffed at as implying the impossibility of carrying out a conjoint scheme, but what had been done showed conclusively that it could be obtained, and it would be far better to have it by consent than under compulsion. The English conjoint scheme was practically ready to be put into operation, but was now in greater peril than it ever before had been. Dr. Andrew Wood said that Scotland waited to see the result of the experiment in England. That was a most admirable device, for the experiment was sure to fail if students refusing the English conjoint examination went to other parts of the kingdom to obtain their qualifications. If the standard for the minimum examination were raised in England while it remained the same elsewhere, what was the chance of the experiment succeeding? Absolutely none. The Bill, having given up, or at least not adopted, the scheme of compulsory conjoint examinations, did its best to amend the defect. First, it insisted on a double qualification for registration; but that would practically disenfranchise more than three-fourths of the authorities in all the divisions of the kingdom; for the single qualifications which were granted by those authorities would be in themselves valueless. Under the English scheme, each body voluntarily resigned its own authority to grant diplomas that should place upon the Register; but if such a scheme were forced upon them, as it would be if not done by consent, the rules established would not be their own, but some one else's. If the Bill were passed in its present form, a doctor of medicine of the University of Cambridge could not be registered unless he was also a master in surgery. Dr. Haldane had expressed a preference for a State examination, but by the institution of such an examination the public would be distinctly told, "Here are a considerable number of gentlemen with excellent titles after their names, but before we are quite sure that they are qualified to practise we must submit them to the minimum test." This would reduce what were now regarded as honours to complete dishonour, and not one of the degrees granted by the authorities would be regarded as implying common fitness to practise. The army and navy examinations were not originally established as tests of competency, but for the purpose of selecting those who in competition showed themselves the best. Another method of State examination was to compel the student to undergo it before obtaining a diploma, and this was what they would drift into if they did not have conjoint examinations. For such a scheme there was very much to be said, but he wished to contrast it with what would happen under a conjoint scheme. Lord Ripon's Bill assumed that the result of the State examination would be to grant to any person passing it a licence to be registered. Under the conjoint scheme which had been sanctioned by the Medical Council, and which there was no doubt whatever would receive the approval of the Privy Council, the person passing the minimum examination would not receive a licence entitling him at once to be registered, but a qualifying certificate which would enable him to proceed to one of the several authorities and obtain a diploma, upon which he could be registered. This was a contrast very much to the advantage of the several combining authorities. If a person passing the State examination received at once a licence to be placed on the Register, it followed that the

whole of the qualifications granted by the authorities of the United Kingdom would become simply honorary, conferring no legal privilege whatever, but only the right to have so many letters added to the name. The result would be that many men would consider the honours not worth having. The reason why the members of the Council (with the exception of the Crown nominees) had seats at that Board was that they represented bodies who had definite legal rights of admitting men to the practice of medicine. Remove those rights, and what right would they have to be governors of the medical profession? He therefore saw nothing but calamity to follow if conjoint examinations were not made compulsory throughout the kingdom. The loss of prosperity or power to the several combining bodies would be as nothing in comparison to the losses that would be sustained if the Bill passed unaltered, or if a State examination were instituted. This was not a matter to be discussed as if only the medical authorities were interested in it. He was anxious to maintain the separate privileges of the authorities, because of his conviction that it would be for the public good. It was because of his sincere belief that the medical authorities had done great things for medical education, and that upon them must depend the improvement of that education in England, that he pressed upon the Council to do nothing which would in any degree mar the usefulness and power of the several bodies. The present Bill was such as might be expected from a Government which was anxious not to imperil existing rights, but it was a distinct indication that it was not desirable to have conjoint schemes, and following upon that would come the collapse of many of the authorities who were represented at the Council, and that would entail a great loss of the power which was now being exercised for good in the cause of medical education and examination.

Dr. FERGUS said he would rather fall into the hands of the Privy Council than into those of the Houses of Legislature. He believed that the Privy Council would do the best they could for the profession at large and for the whole community. He regarded the present discussion as a kind of shunting of the Government Bill, which he had expected would be taken and considered clause by clause.

The PRESIDENT said the Executive Committee took great pains to ascertain the way in which the subject of the Bill would be most conveniently discussed by the Council, and they had decided that Dr. Humphry's resolution would best secure that object. The President said various circumstances led him to regard it as his duty to express an opinion on this matter. It was one of the gravest issues that had ever been before the Council, and he saw no reason for altering the opinion which he formed many years ago, or the vote which he had given on every occasion when this subject had been before them. He wished to reaffirm once more his conviction that the continuance of nineteen separate licensing bodies in Great Britain was inconsistent with the best interests of medical study. He should therefore vote for Dr. Humphry's motion, believing that it would further the real interests of professional education, and that if the present opportunity were lost that might happen to the various medical authorities which he was very disinclined to have a share in.

Dr. HUMPHRY, in reply, repudiated the idea that his motion had been brought forward for the purpose of shunting the Bill. The object of the resolution was simply to reassert in the Bill that which there was reason to believe was not in the Bill, in consequence of the opinions which had been pressed upon the Government by Scotland. One of the difficulties which had been experienced by those who had advocated the resolution was that they could not get to close quarters with the gentlemen who took the opposite view. For some time he feared that there would be no definite argument against the principle of the resolution, and that the opponents would stand upon the simple, unassailable rocks of "I can't" and "I won't." As time went on, however, certain arguments were adduced, chiefly by Mr. Turner, who said it would be impossible to secure uniformity. Of course it would be just as easy to secure exact uniformity between Scotchmen and Englishmen as in the standard of examination. The object was not to strive after an impossibility, but after that fair uniformity which the public was entitled to expect. Professor Turner remarked that it would give great facility for the work of cramming, but he gave no reason to support this view. After a time the real point came out. The Scotch universities were successful and prosperous. "We are doing well," it was said; "we wish to be let alone; our benches are overflowing, our coffers are full." He was quite ready to attribute the prosperity of the Scotch universities to a great extent to the excellence of their teaching and the energetic steady work of the students. It would be most unworthy in a professor of anatomy in England not to estimate in the very highest manner the noble work which had been done in Scotland by such men as Mr. Turner, Dr. Allen Thomson, and Dr. Struthers; and those who were acquainted with medical work would agree with him that the true basis of success in a school was the way in which the anatomical teaching was conducted. He therefore heartily rejoiced in the well-deserved success of the Scotch universities. Still, it must not be forgotten that there were 2000 students in Scotland, and to those students England was a place of considerable interest. The road to England from Scotland was a well travelled one, and the fertile valleys of England were not without attractions to the Scotch, who sniffed them from a distance, and cried "Ah, ah!" (laughter). Under the directions of the Council he had had the honour and pleasure of visiting the examinations at the Scotch universities, and his opinion was recorded in print, and showed that he had no low estimation of the examinations at the Scotch universities. Still the fact remained that the road to Scotland was largely trodden by Englishmen, who went there to acquire their wings, with which they flew back and endeavoured to soar above the ordinary level of the English practitioner. This was a considerable grievance in England, and might be regarded as a grievance by the English universities. It was owing to the position of the English universities that the degree of doctor was held in such high estimation, and the Scotch universities to a considerable extent profited by that. He would not have referred to this matter had it not been that the number of degrees given by the English universities had been referred to in rather a disparaging manner, as compared with those given by the Scotch universities. He did not dispute the facts, but he wished them to be regarded in a proper light. The reason why the number of English degrees was so small was the difficulty of obtaining them; while the large number of Scotch degrees was partly owing to the facilities afforded for obtaining them. The English scheme would undoubtedly prove a failure if the other divisions of the kingdom did not adopt a similar plan. The object of the resolution was to enable the several corporate bodies now, while there was yet time, to take the affair into their own hands, so that each division might frame such a scheme as was best suited to that division. England had framed a scheme suited for itself; let Scotland and Ireland do the same. Let them use their liberty with discretion, and draw out schemes which were best suited to themselves. That was all that was intended—that they should be compelled to form a voluntary combination which would prolong the liberty of the several corporations to regulate the education and examination of the students.

The motion was then put to the vote, and carried by 14 to 10.

The Council then proceeded to consider the Medical Act Amendment Bill.

Dr. PITMAN moved, "That the duties of the Medical Council in relation to the various licensing authorities (whether in separate or in joint action) should not be extended to the initiation of the examination-rules, under which qualifications are to be granted, but should remain restricted, as now, to duties of superintendence and control, with power of making representation to the Privy Council in cases of default." The work of the Council was, first, to lay down rules for regulating the examinations; secondly, to determine the subjects in which the students were examined; and, thirdly, to determine the standard for passing. The Act of 1858, Clause 21, gave that power of supervision, and in the present Bill there did not appear to be any additional power given, though there were largely extended additional duties. Even supposing the Council were willing to undertake the duties of preparing the examination rules, was it desirable that they should do so? Not only all the universities and corporations, but the students and the public at large, were affected by the proposal. Would the universities consent that the regulations for granting their degrees should be laid down by this Council? The 14th clause of the Bill implied that the twenty-four gentlemen forming the Medical Council were more competent to lay down regulations for the course of study than the twenty-four gentlemen constituting the Council of the College of Surgeons, and he could not agree in that view. It appeared to him that

the mode in which it was proposed to frame the regulations was cumbrous, complicated, and costly, and even if the Council were prepared to perform the duty, it was very undesirable that it should be cast upon them.

Dr. ROLLESTON seconded the motion. The Medical Council, he said, was fitted for higher work than that of regulating examinations.

After a short discussion the resolution was unanimously agreed to, the words "in general" being subsequently added after the words "but should."

The Council then resolved itself into committee for the purpose of considering the clauses of the Bill.

Clauses 1 and 2 were approved.

On Clause 3,

Mr. MACNAMARA said the council of the Royal College of Surgeons, Ireland, were unanimously of opinion that in addition to qualifications in medicine and surgery a qualification in midwifery should be required before a name was placed on the Register. Dr. Stokes had solemnly assured him that he had never in his life been in the room when a woman was confined. He wished to move that the word "triple" should be inserted instead of "double," and words added requiring a qualification in midwifery.

The proposal was not seconded, falling, as Mr. Macnamara said, stillborn.

Dr. WOOD moved, and Mr. TURNER seconded, "That Clause 3 be approved."

Mr. SIMON moved as an amendment, "That the Council so far approves of the intention of Clause 3 as to be of opinion that none but persons whose qualifications have been tested in medicine, in surgery, and in midwifery, should in future be admitted to the Medical Register; but that, as regards the manner in which effect should be given to this intention, the Council refers to its previous votes on the subjects of conjoint boards and examination rules."

Dr. HUMPHRY seconded the amendment, which, on a division, was carried by 13 to 10.

The Council then resumed.

A letter was read from the President of the Obstetrical Society of London, requesting that that Society might be allowed the opportunity of explaining to the Council their scheme for the examination and registration of midwives.

On the motion of Sir James Paget, seconded by Dr. Andrew Wood, the request was agreed to, and Tuesday, 2 o'clock, was fixed for the interview.

SATURDAY, APRIL 13TH.

The Council re-assembled at 1 o'clock, Dr. Acland in the chair.

Dr. PETTIGREW presented to the Council a copy of a petition from the University of Glasgow to the House of Lords with regard to the Medical Act (1858) Amendment Bill.

On the motion of Mr. Simon, seconded by Mr. Bradford, the petition was ordered to be entered on the Minutes.

The PRESIDENT announced that the Lord President of the Privy Council was prepared to receive members of the Council on Monday at 1 o'clock.

Mr. SIMON moved, "That the resolutions already passed by the Council with reference to the Medical Bill be laid before the Lord President. Any further resolutions that might be passed that afternoon would probably only refer to details, and might be communicated to his Grace before the House went into Committee on the Bill.

Dr. WOOD said if only the resolutions already passed were submitted, it would appear as if they wished to prevent the passing of the Bill, though there was a great deal in it that was good.

REGISTRATION OF DENTISTS.

Dr. ROLLESTON said that in the letter from the President of the Dental Reform Committee the following passage occurred: "But should the Government ultimately require that the Dental Bill should be embodied in the Medical Bill introduced by the Duke of Richmond and Gordon (1878), or should the Medical Council think it desirable that the dental should be embodied in the general Bill, then, on behalf of the Dental Reform Committee, I beg to suggest that in presence of the well-matured and very efficient system of dental education of the College of Surgeons of England, it is not desirable that the Medical Council should be required to undertake to originate a new scheme of education as proposed in the Medical Bill, Clause 23 (i), but that the Council should have full power to approve, modify, or refuse its assent to the educational details from time to time proposed by the surgical bodies authorised in the Bill to grant dental qualifications." This was precisely in the same spirit as that which was proposed by their Irish, Scotch, and English friends, and he therefore hoped the Council would agree to it. He put it forward on the general ground that the work would be much better done by a body like the Medical Council, which was practised in dealing with such questions as the supervision of examinations, than by any other body. Unless they took this dental business into their own hands the Government might drop the question for the present, and then the result would be that before long there would be more Medical Bills and more State interference. The less the medical profession had to do with the State the better. The resolution he wished to propose was—"That it is not desirable that the Medical Council should be required to undertake to originate a new scheme of examination rules—Clause 1 of Section 23,—but that it should be entrusted with some such supervisory power as regards the educational details from time to time proposed by the medical authorities authorised in the Duke of Richmond's Bill as it already exercises with regard to other examinations."

Mr. TURNER proposed, and it was agreed to by Dr. Rolleston, that the words "medical bodies" should be substituted in the resolution for the words "surgical bodies." He also suggested that the resolution should be prefaced by a statement that a provision should be made in the Medical Bill for the registration of dentists.

Mr. SIMON proposed the insertion of the words "or otherwise" after "Medical Bill."

Dr. ROLLESTON said he would move first as a separate resolution—"That it is desirable that provision should be made in the Medical Act (1858) Amendment Bill for the registration of dentists." He regretted that he could not consent to the addition recommended by Mr. Simon.

Mr. BRADFORD seconded the motion.

Dr. WOOD said the first thing for the Council to decide was whether it was desirable that the dentists question should be settled in the Duke of Richmond's Bill, or in that which had been brought in by Sir John Lubbock. He believed that some of their bodies did not much care about the registration of dentists; but his own opinion was that it would be better to deal with it in the present Bill. He quite agreed that it was desirable to gather up these matters of dentistry, midwifery, lunacy, &c., into one Bill, rather than have them spread over a number of different statutes.

Mr. SIMON considered that the form in which the dental question was dealt with in the Government Bill was not so good as that of Sir John Lubbock's Bill. He did not object to the general principle.

Sir D. CORRIGAN regarded the resolution as quite unnecessary. He approved of Mr. Simon's suggestion to add the words "or otherwise." The Council was already hampered with so much work that they ought not to burden themselves with this subject. He ventured to say that there was not a man at the Council who was competent to pronounce an opinion upon dentistry.

Dr. Rolleston's motion was carried.

Dr. ROLLESTON next moved, "That it is not desirable that the Medical Council should be required to undertake to originate a new scheme of examination rules—Clause 1 of section 23; but that it should be entrusted with the same supervisory powers as regards the educational details from time to time proposed by the medical authorities, authorised in the Duke of Richmond's Bill, as it already exercises with reference to other examinations."

On the suggestion of Mr. Simon, Dr. Rolleston accepted the following amendment:—Instead of the words "the same" before "supervisory powers," to insert "some such."

Sir D. CORRIGAN thought the Council had now succeeded in making itself utterly ridiculous. According to the resolution they were going to exercise some such power over dentists as in a midwifery examination, so that when an old lady had a new set of artificial teeth, some members of the Council would have to be present to supervise the process. They had left the question of pharmacy to a separate Bill, and it would be better to do the same with regard to dentistry.

The motion was then carried.

Dr. A. SMITH thought that in paragraph *(a)* of Clause 4 of Section 23 the words "dental surgery" were very objectionable. The word "surgery" ought not to occur at all with regard to dentists. He therefore moved—"That in paragraph *(a)* of Clause 4 of Section 23 of the Bill, the words 'or in dental surgery of,' be omitted."

Mr. SIMON hoped that the Council would not go into mere verbal or etymological questions.

Dr. SMITH said there was a principle involved in his proposal.

Mr. SIMON said it was absurd to attempt to do away with the common use of words.

Dr. WOOD said he had no objection to a man being registered as a "dental surgeon" if he held a diploma, but if he did not hold a diploma he should be registered merely as a "dentist."

Mr. SIMON said to protect the use of the word "surgeon" in such an extreme manner was an outrage on the common sense and language of the country. Could it be pretended that the privileges of the surgical corporations were encroached upon by men who called themselves veterinary surgeons? The term "surgeon dentist" had been recognised as a special term for dentists by no less an authority than Lord Chief Justice Cockburn in the Court of Queen's Bench.

Dr. STORRAR said it would be a piece of Quixotism on the part of the Council to attempt to reverse the ordinary terms hitherto applied to persons practising dental surgery. The expression was known to everybody, and to cut off the word "surgeon" was to inflict a kind of degradation upon a class of practitioners whose education was now taking a distinguished place before the world, and upon a profession which had become really essential to the public. In a trial which took place nearly nineteen years ago, a man was prosecuted for using the term "surgeon dentist," and in summing up, Lord Chief Justice Cockburn said, "Why, dentists have always called themselves 'surgeon dentists.' Custom and immemorial usage have sanctioned it. Everybody understands what it means, and knows them as such." It was unnecessary to add anything coming from such a source.

Sir D. CORRIGAN seconded Dr. Smith's motion. He objected to a term which expressed a hybrid, half surgeon and half dentist. He did not attach the slightest importance to the observation by the Lord Chief Justice to which Dr. Storrar had referred, for, generally speaking, lawyers and judges were profoundly ignorant on medical matters.

Sir JAMES PAGET said the term "licentiate in dental surgery" had been adopted by the Royal College of Surgeons under its charter. Could it be seriously proposed to get an Act of Parliament to abolish that Royal Charter, and to make it criminal, under a penalty of £20, for anyone possessing the title of "licentiate in dental surgery" to use it?

Dr. Smith's motion was negatived, only three members voting for it.

Dr. ROLLESTON moved, and Mr. SIMON seconded, the following resolution, which was agreed to:—"That the Council suggests the adoption of Clause 11 of Sir John Lubbock's Bill—(viz.: 'The General Council may, if they see fit, establish in the register of dentists distinct sections for the registration of persons, not being British subjects, resident in the United Kingdom, and possessing such foreign qualifications as in the opinion of the Council are a sufficient guarantee for the possession of the requisite knowledge and skill for the efficient practice of dentistry, and for the registration of persons so resident, and possessing such colonial qualifications as in the opinion of the Council are such guarantee as aforesaid; and any person registered in either of such sections shall be deemed for all purposes to be registered under this Act)'—instead of Clause 5, Section 23, of the Government Bill—(viz.: 'There shall be also entered in the dentists' register, in separate alphabetical lists, such colonial and foreign dentists as are authorised by the scheme to be so registered, and the scheme shall make the like provision for the registration of colonial and foreign dentists as is made by this Act with respect to the registration of colonial and foreign practitioners in the Medical Register.')"

It was also agreed, on the motion of Sir James Paget, seconded by Dr. Andrew Wood, "that the Council approves the portion of the Bill that relates to the registration of dentists."

COLONIAL AND FOREIGN DIPLOMAS.

On Section 7, which enacts that "the medical diploma or diplomas granted in a British possession or in a foreign country, which are to be deemed recognised medical diploma or diplomas for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the General Medical Council as entitling the holder thereof to practise medicine and surgery in such possession or country, and as representing at the time of the grant thereof a degree of knowledge, as tested by examination, equal to or greater than that which at the same time was required to obtain in the United Kingdom such qualification as entitles the holder to be registered in the Medical Register," the following alteration was agreed to, on the motion of Mr. Simon, seconded by Dr. Wood:—Instead of the words from "representing" to the end, to insert "furnishing in the opinion of the Council sufficient guarantees of the possession of the requisite knowledge and skill for the efficient practice of medicine and surgery."

On Section 5, which relates to registration of a colonial practitioner with a recognised diploma, and requires that such person should have "practised medicine or surgery, or a branch of medicine or surgery, for more than ten years elsewhere than in the United Kingdom," a discussion took place as to the restriction of time, and ultimately the decision on the question was adjourned till Monday.

The President, Dr. Wood, and Dr. Humphry, were appointed as a deputation to communicate to the Lord President of the Privy Council the resolutions relating to the Government Bill which had been passed by the Council.

Dr. WOOD gave notice that at 4 o'clock on Monday he would move the appointment of the Executive Committee.

The PRESIDENT said experience had shown that it was very inconvenient that the Executive Committee should cease on the first day of the meeting of the Council.

The Council then adjourned.

MONDAY, APRIL 15TH.

The Council met at 2 o'clock, the President, Dr. Acland, in the chair.

The PRESIDENT.—Perhaps the Council would wish to know the result of the interview with the Lord President, which has taken place under your instructions. I laid before the Lord President the following observations:—"The Medical Council deputed the President, Dr. Humphry, and Dr. Andrew Wood to present to your Grace certain resolutions which they have arrived at. The Council met on April 10th to consider the letter which your Grace forwarded with copies of the Medical Act (1858) Amendment Bill, read in the House of Lords on March 19th. All the subjects on which the Council last year addressed your Grace are dealt with in this Bill, viz.:—1. The recognition of foreign and colonial qualifications in England. 2. The privileges of women in regard to medical qualifications. 3. The appropriation of penalties under the Medical Act. 4. To some extent the education of midwives. 5. And, indirectly, the emendation of the law affecting certificates of lunacy. After the second reading of the Bill the Council may have to suggest to your Grace's consideration certain amendments in various clauses relating to these subjects, and to some minor points in the Bill, prior to the consideration in Committee. The Council are aware that your Grace was unwilling to bring in any Government Bill which did not deal with all the chief subjects that were known to need attention in regard to medical legislation. They find, accordingly, in the Bill, clauses having reference to subjects that are admitted to be of importance and to need settlements other than those named last year by the Council. They find clauses relating to the mode of conducting examinations in the United Kingdom, and to framing examination rules. They perceive that the permissive principle of combination of any of the licensing bodies is continued with modifications. On this subject a resolution has been passed by the Council, which forms Clause 3 of the Minutes for April 12th, 1878 (pp. 37, 38). If the Bill pass in its present form it would, in the opinion of the majority of the Council, be necessary to make such modifications in the rules as are set forth in the resolutions in Clauses, 5, 6, 9 of the Council's Minutes for April 12th, 1878 (pp. 38–40). On the subject of the registration of colonial practitioners and other subjects therein the Council is engaged now. On the subject of dentists they have passed resolutions which form Clauses 6, 7, 9, 10, 11, of the Council Minutes for April 13th, 1878 (pp. 48–50). As regards the registration of midwives, they have not yet had time before the second reading to pass any resolution. But they have already notified to your Grace (see Minutes, vol. xiv., p. 198, clause 14):—'That the Council, without assenting in all details to the scheme of the Obstetrical Society, is of opinion, with the Society, that it would be desirable to provide by legislation for the following two objects—first, that means under legal sanction should be provided for giving credentials of quali-

fication to competent midwives; and, secondly, that the lives of women in labour should, so far as practicable, be protected from the incompetent.' And to-morrow they will receive a deputation from the Obstetrical Society as to the details of their proposal. The Council are still engaged in considering the remainder of the clauses in the Bill, and will further communicate with your Grace thereon after the Easter recess." Upon that his Grace said that he would give the fullest attention and consideration to all those particulars upon which the Council had already resolved, and to any further resolutions which the Council might pass at such times as the Council thinks fit—that is, either during the present session, or at any subsequent session that may take place at the will of the Council, if it takes place before the House of Lords goes into Committee on this Bill. He then said that he was going to bring forward the second reading this afternoon, and that in consequence of that and some important business in which he is engaged he was unable to receive the deputation of the Obstetrical Society which he had wished to do this afternoon. He was so occupied that it was impossible for him to do so, but as the Easter recess begins to-morrow, and he would not be able to see them at all now until after the Easter recess, having understood that they were to meet this Council to-morrow, he would be happy to receive through this Council any further communication on the subject, if there be any to be forwarded after the interview with the Obstetrical Society. Then he added that he had every reason for hoping that this evening the second reading of the Bill would be passed, and then that in that case he would introduce the Bill in committee for the consideration of all the amendments which had been presented to him, and for their full discussion, at the earliest possible period at which it could be done. Considering the other arrangements of the Government, and the work before the House, the earliest day at which he could undertake to do this would be on the 20th of May next, and in his Grace's judgment, if the discussion could not successfully take place on the 20th of May or thereabouts, there would be no chance of the Bill passing this year; that he would give his best attention to all amendments which should come before him before the 20th of May, and on that day he would proceed with the consideration of the Bill in committee. I thought it my duty to say—and I trust the Council, as well as my colleagues, will not think I went too far in this statement—that we had not yet considered fully the whole of the Bill; but I was quite sure I expressed the individual feelings of the members of the Council, that, whatever opinions there might be as to the value of the Bill, we were all very sensible of the great trouble he had taken.

Mr. TURNER moved, Mr. MACNAMARA seconded, and it was agreed to, that the President's statement should be incorporated in the Minutes.

Mr. TEALE drew attention to a letter which had been received by the registrar from Dr. Edward Waters, of Chester, stating that the Medical Reform Committee would have a meeting in London on Wednesday next, and expressing a hope that an opportunity would be given to some of its members to attend before the Council before twelve o'clock on that day. He moved, "That, in reply to the letter from Dr. Waters, the President be authorised to receive Dr. Waters and the members of the Medical Reform Committee on Wednesday at eleven o'clock, in order to hear their views of the proposals referred to in Dr. Waters's letter, and that such members of the General Medical Council as desire it shall be present at the interview."

Sir WM. GULL seconded the motion, which, after some discussion as to the time, was agreed to.

ADJOURNED CONSIDERATION OF THE MEDICAL ACT (1858) AMENDMENT BILL.

Dr. WOOD, who had given notice of his intention to move "That with respect to Section 5 of the Bill, a colonial practitioner must have practised five years after obtaining his diploma, or else shall be required to pass the final examination of one of the medical authorities of the United Kingdom; in the latter case he should be entitled to be placed upon the general Medical Register," said he did not now feel inclined to adhere to the terms of his motion, and he would therefore move that the Council go into committee on the Bill.

Having been seconded by Dr. STORRAR, the motion was agreed to.

Dr. WOOD said it was well known that great pressure had been brought to bear upon the Government to legislate with regard to colonial and foreign degrees. One object was to do justice to their colleagues who held foreign or colonial diplomas, but another object was to open up to British registered practitioners the opportunity of practising in the colonies and foreign parts. At present such persons were liable to be called upon to pass an examination. The restriction in the Bill was a very illiberal one, and he did not think the question of examination should be brought in at all. As to the length of time which a colonial practitioner should be required to practise before being admitted to the Register, he thought two years was quite sufficient. That would prevent the evil of some men going to a colony for the express purpose of getting on the Register more easily than if they were examined in this country. He would, therefore, propose that the word "two" should be substituted for the word "ten."

Mr. TEALE seconded the motion.

Dr. ROLLESTON said the object of every member of the Council was to prevent persons who had been rejected by one of the inferior boards in England, or one of the superior boards north of the Tweed, from running over from Liverpool to Canada, and returning to flaunt a colonial diploma in the faces of those who had rejected them, while at the same time they wished to permit Canadian licentiates to practise in this country. It would be simply a *brutum fulmen* to lay down a certain period of practice, for no one could say what the practice had been. He would move as an amendment to Dr. Wood's motion, that the section should read: "Where a person who has not been domiciled in the United Kingdom within two years immediately preceding the obtaining by him of a diploma, shows &c." He was quite willing to add a clause empowering the Council to admit to the Register any person who had practised for a long time with distinction in the colonies.

Mr. BRADFORD seconded the amendment.

Mr. SIMON said the provision as to ten years was inserted in Lord Ripon's Bill eight years ago simply because of the hardness of the hearts of the members of the Council, the Council at that time being obdurate against foreign and colonial practitioners. Immense progress had been made since that time, and he thought it must have been something like inadvertence on the part of the draughtsman of the present Bill which caused the insertion of the ten years' clause. What was to be aimed at was not a long period of sojurn in the colony, but that men should not go over to a colony for the express purpose of getting a diploma.

Dr. WOOD withdrew his motion, and Dr. Rolleston's amendment then became the original motion.

Dr. STORRAR said he knew something of colonial universities, and was prepared to say that their qualifications were likely to be of a higher kind than many that were granted in this country; and it would be unjustly offensive to many colonial universities if they were treated with suspicion. No doubt, in the United States, there were facilities for obtaining qualifications which the Council ought to guard against; but such facilities did not exist in Canada and Australia, where the ambition of the gentlemen connected with the universities was to make their qualifications of an eminent character. He did not conceive of anything more calculated to inspire a Canadian or an Australian with a feeling of soreness than such a clause as was proposed in the Bill. Such a restriction would have effect only in the United Kingdom, for a degree granted in the University of Toronto would enable its possessor to practise in Jamaica, or Barbadoes, or Australia. After the terrible disaster under Governor Eyre, Jamaica was converted into a Crown colony. Governor Grant then found that he could not get a sufficient number of registered British practitioners to supply the wants of the island, and he therefore admitted Canadian graduates to practise, his argument being that the men who were qualified to practise on Canadian subjects were surely qualified to practise on Jamaica negroes.

Dr. PITMAN said last year the Council discussed the subject of colonial diplomas at considerable length, and came to the decision "that medical qualifications granted under legal authority in any part of her Majesty's dominions outside the United Kingdom, and entitling to practice in such part, should be registrable within the United Kingdom on the same terms as qualifications which are granted within the United Kingdom, but in a separate alphabetically arranged section of the Register." That was infinitely preferable both to the clause in the Bill and to the motion which had been moved by Dr. Rolleston. There was something not very creditable in the Council, after grave delibera-

tion, coming to a decision, and then the very next year, without any very strong reasons for changing their opinions, arriving at a different conclusion. He therefore proposed as an amendment, "That the Council adhere to the resolution of last year in reference to the registration of colonial diplomas."

Dr. QUAIN seconded the amendment.

Dr. ROLLESTON withdrew his motion in favour of Dr. Pitman's proposal.

The PRESIDENT said it must have been by accident that in the present Bill reference was made to Lord Ripon's Bill, instead of to the representation of the Council. He knew that the greatest endeavours were being made in Canada to put their medical examination on a level with that of England.

Sir JAMES PAGET said the Council must not lose sight of the fact that for the last three days they had been practically expressing great dissatisfaction with their own system of examination. He was prepared to go as far as possible in liberality towards the colonies, but it was surely rather a strong measure to propose that they should be more liberal to them than to themselves. He considered that Dr. Rolleston's motion was preferable to Dr. Pitman's.

Mr. SIMON said when the English system was amended, the Council might perhaps apply a stricter test to colonial qualifications.

Dr. STORRAR said the number of men who would go to a colony to obtain a diploma which they were unable to get in the United Kingdom would be exceedingly small, and he thought too highly of those who were connected with colonial universities to believe that they would admit such men to their diplomas. They would naturally ask them why they did not get their qualifications in the mother country, and a halo of suspicion would at once be cast around them, which would shut the door of the licensing body against them. He scarcely thought it was worthy of the Council to take these precautions.

Sir W. GULL reminded Dr. Storrar that he was not so liberal towards the Scotch universities. (Laughter.) He would prefer that the motion should run, "That where a person who has been *bonâ fide* domiciled in any British possession can show evidence of holding some recognised diploma or diplomas, &c."

Dr. HUDSON seconded Sir W. Gull's suggestion.

On being put to the vote, the amendment was lost.

Dr. WOOD moved another amendment, "That in Clause 5, lines 1 to 4, of the Bill, for the words, 'Where a person who either is not domiciled in the United Kingdom, or has practised medicine or surgery or a branch of medicine or surgery for more than ten years elsewhere than in the United Kingdom,' there should be substituted the following words: 'Where a person has been domiciled in a British possession for two years immediately preceding the granting of his diploma.'"

Mr. TEALE seconded the amendment.

Sir D. CORRIGAN said the amendment altogether ignored the existence of the body that passed the best medical graduates in the United Kingdom—namely, the University of London—which permitted any one to come up for examination.

Dr. Wood's amendment was carried by 13 to 9.

On its being put as a substantive motion,

Mr. SIMON moved an amendment, "That where a person who has been *bonâ fide* resident in a British possession outside the United Kingdom shows that he is of good character, and holds a recognised diploma or diplomas (as hereinafter defined) granted in a British possession, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register."

This was seconded by Dr. STORRAR and carried, and having been put as a substantive motion, was agreed to.

A ballot then took place for the Executive Committee, and the following members were reappointed:—Dr. Quain, Dr. Wood, Dr. Smith, Dr. Humphry, Sir J. Paget, and Mr. Simon.

The Council, after a short adjournment, resumed the consideration of the Medical Act Amendment Bill.

Section 6, relating to the registration of foreign practitioners, was, on the motion of Mr. SIMON, seconded by Sir J. PAGET, in substance approved.

On Section 8, providing for the registration of eminent foreign or colonial practitioners,

Dr. HALDANE moved an amendment. He could not, he said, agree with the principle involved in the section, and he moved "That, in the opinion of the Council, no colonial or foreign practitioner should be registered as such unless he has obtained a registered medical diploma or diplomas in a British possession or foreign country."

Mr. SIMON explained that previous sections had provided for recognised diplomas, and that Section 8 was intended to meet the case, which occurred every now and then, of a well-known person who had made valuable contributions to medical science, but did not possess a diploma.

Dr. HALDANE'S amendment was not seconded, and the motion for the adoption of the section was carried.

On Section 9, as to the contents and form of the Medical Register,

Mr. SIMON suggested that some provision was required to make it evident that the registration alluded to in Clause 7 of the section meant additional registration.

Some conversation followed with reference to the clause, which was regarded as somewhat obscure; but no resolution was passed respecting it, it being understood that the attention of the Government should be called to the wording of the clause, with a view to its being rendered more intelligible.

On Section 11, providing for the erasure of names from the Register,

Dr. HUMPHRY contended that its effect would be to make the Council a prosecuting body, a function which it had hitherto repudiated.

Mr. TURNER called attention to the proviso that the name of a person should not be erased for "a political offence out of her Majesty's dominions," and inquired whether it was intended to erase a name on account of a political offence at home. Attention, he thought, should be called to the subject, there being a clear and recognised distinction between political and other offences.

Dr. STORRAR thought it would be dangerous for the Council to seek to determine the particular kind of political offence that should call for the removal of a practitioner's name from the Register.

No resolution was passed with reference to the section.

On Section 13, providing for the appointment of a Committee of the Council for the purpose of erasure from and restoration to the Register,

Dr. APJOHN said it would be monstrous to give the power of erasure to so small a tribunal as a committee of five, three being a quorum. An ordinary criminal was tried by a jury of twelve men, whose decision must be unanimous; and he protested against giving to a small committee the power of injuring a man for life.

Dr. WOOD said that the power given to the committee by the section was a tremendous one, and he was entirely opposed to it. He believed that the Council, in all cases of the kind contemplated that had come before it, had investigated them most carefully, and had always administered justice with a tendency to mercy. The power given to the Council to deprive men of their means of livelihood was such as was not given to any other body, and it ought to be exercised with the greatest care. He believed that more confidence would be felt in the decision of the whole Council than in that of a small committee.

Mr. SIMON thought that the section should be omitted altogether.

Dr. SMITH objected to the power proposed to be given to the committee; but he thought that the Executive Committee might be entrusted with the power of removing the names of those who had been convicted by a court of law.

Dr. STORRAR objected even to that modification. The retention of an unworthy name for a short time upon the Register was a small matter as compared with the risk of removing a name hastily. The provision contained in the section was wholly opposed to the opinion of jurists. It might be convenient that the Council should have the power of removal, but it should be exercised wisely and tenderly.

Dr. ROLLESTON approved of the section, and said that the Duke of Richmond, in the House of Lords (no doubt prompted by eminent jurists), had laid great weight upon the argument that a large body like the Medical Council was unfit to exercise judicial functions. A smaller number of persons would have a greater sense of responsibility. Five was a good number, but he thought that all should be in attendance, instead of entrusting the power to a quorum of three. The Government, he thought, would not have proposed the section without good reason.

Dr. FERGUS suggested that the power of suspension should be given to a small body, the power of final erasure resting with the whole Council.

The PRESIDENT said that names had been erased, sometimes by the whole Council, sometimes by a Branch Council, and sometimes by the Executive Committee, but an opinion had been given by Lord Coleridge that the Executive Committee did not possess the power.

Dr. HUMPHRY pointed out that the section contemplated erasure on two grounds—for conviction by a court of law, and for professional misconduct, and suggested that the two points should be considered separately. In the one case the Council might be the best tribunal, and in the other a small and specially selected committee.

Dr. WOOD urged that the publicity attending the proceedings of the whole Council was a guarantee for the proper exercise of the power of erasure. In the case of a small committee there was no sufficient check upon the administration of its functions.

Dr. ROLLESTON said that the case was analogous to that of disbarring and disbenching, which was done in private, the crime in question being a professional one that did not concern the public.

Mr. TURNER pointed out that the Council, in all cases that came before it, took evidence and gave its decision in public, but deliberated in private.

Dr. APJOHN thought that the passing of the section would make the Council very unpopular, and involve it in litigation. If a committee were appointed under it, it would necessarily be composed of English members, and it would be very undesirable to entrust such a power to one division of the United Kingdom.

After some further discussion the following resolutions were adopted:—"That all questions relating to the erasure of names for infamous or disgraceful conduct ought, in the opinion of the Council, to be reserved for decision by the general body of the Council, and that it be recommended to the Lord President to amend Section 13 accordingly. "That it is desirable that the power to erase the name of any person convicted of felony or misdemeanour in a court of law be deputed to a committee of the Council."

The Council then adjourned.

TUESDAY, APRIL 16TH.

The early part of the sitting of the Council was occupied in receiving a deputation from the Obstetrical Society, headed by Dr. West, who explained the nature of the scheme for the registration of midwives proposed by that Society, and answered a number of questions with reference to the provisions on that subject in the Government Bill. A proposal was afterwards made by Mr. Simon to the effect that the Council ought not to take the initiative in the arrangements for the examination of midwives, but would, if desired, provide examination rules for the purpose; but this was negatived, and the general principle of the Government proposal was accepted. Several other provisions of the new Bill were considered, and the Council adjourned.

ROYAL COLLEGE OF PHYSICIANS.

A MEETING of the Fellows was held on Monday afternoon last. The Roll Committee was empowered to take the necessary steps for the publication of the new edition of the College Roll. It was stated that two volumes had been printed, and the third was far advanced towards completion under the editorship of Dr. Munk.

The following resolutions were agreed to unanimously:—"1. That the College, in answer to the application laid before it at the Comitia held on April 2nd, do contribute one hundred guineas towards a statue of Harvey, to be erected at Folkestone, his birthplace." "2. That, in accordance with the suggestion of the President, the College do hold a festival-banquet in honour of Harvey at the College on some convenient day during the present season, this being the three hundredth year since Harvey's birth." A committee was appointed to make the necessary arrangements for giving effect to this latter resolution.

The College then proceeded to elect a President for the forthcoming year, and Dr. Risdon Bennett was unanimously re-elected. Dr. Bennett previously delivered an address, in which he reviewed the work of the College during the past twelvemonth.

ARMY MEDICAL REFORM.

THE Royal College of Surgeons of Ireland have addressed a letter to the War Office, from which we abstract the following allegations of complaint:—

"Since the receipt of your communication the President and Council have taken further steps for the purpose of ascertaining accurately the causes which render the Army Medical Service now so unpopular—which produce the dissatisfaction that exists among those serving in it, and which deter eligible candidates from joining. These are—Firstly, the short service scheme now in existence. Secondly, the abolition of the regimental system. Thirdly, the frequent changes in warrants, after they have been published under Royal authority with her Majesty's signature, and on faith of the permanency of which warrants medical officers have accepted service. This has produced an utter want of confidence in and distrust of the service. Fourthly, the differences which are made between combatants and medical officers in regard to ordinary and sick leave. Fifthly, the almost absolute refusal to medical officers of the privilege to exchange. Sixthly, the virtual withdrawal of forage allowance from those by rank entitled to it. Seventhly, the quarters allotted to medical officers in barracks being almost invariably regimental, while they, as departmental officers, are supposed to be entitled to departmental quarters. Eighthly, the discomfort caused to medical officers by want of a soldier servant, while the sum allowed in lieu thereof is incapable of providing a civilian. Ninthly, the length of time (five-and-twenty years) before the medical officer can claim a right to retire from the service on adequate pension. Lastly, the roster, as now kept, which has been withdrawn from public inspection, so that no officer can tell how he stands in regard to foreign service; whereas formerly this document was exposed in the waiting-room at Whitehall-yard for each medical officer's specific information.

POISON IN THE NURSERY.

To the Editor of THE LANCET.

SIR,—We are desirous of drawing the attention of the public to the following:—

For some time past there has been a sad epidemic among the young children in the neighbourhood of London, ending, indeed, in many cases with the death of the child, the disease presenting every appearance of erysipelas. A client of ours, whose child was similarly attacked, suspected the *violet powder* in use in the nursery, and sent a packet to us for chemical analysis. We returned a certificate (and, we may add, much to our own astonishment) stating that it contained *25 per cent. of white arsenic!*

White arsenic is, we believe, at the present time exceedingly cheap—at all events, cheaper than *starch*, of which violet powder is usually made. These poor children, then, have suffered and died from arsenical poisoning.

We have ourselves purchased several packets of this powder, and, having submitted them to chemical analysis, discovered the same poison in the same amount.

Comment upon all this is useless. We can only add, now when too late to save the lives of the little ones, our analyses have been confirmed by the medical men in the neighbourhood. The remarks upon violet powder in connexion with the trial of Madame Rachel being *à propos* of this, we thought it only a matter of duty to warn mothers against purchasing these things, except from tradesmen of the best respectability.

We remain, Sir, yours truly,

EVANS & JONES,
Leadenhall-street, City, April 12th, 1878. Analysts.

THE LANCET.

LONDON: SATURDAY, APRIL 20, 1878.

NEVER was a target more effectually riddled than the Bill of the Government has been by the criticism of the Medical Council, which in the main, has been very creditable to it. By this we mean that it has been conceived in an Imperial spirit, and, on the main question, has risen above care for mere questions of corporation interests. The speech of Sir JAMES PAGET, in support of Dr. HUMPHRY'S successful motion in favour of Conjoint Schemes, was the best of the session. It was in good temper, full of good judgment, and couched in that lucid, well-ordered language, which constitutes the best kind of eloquence. There was but one point in the objections to the Conjoint Board system which Sir JAMES did not tackle, and that was the serious inequality that will obtain in the different divisions of the kingdom in the matter of the cost of diplomas. All who heard the speech must feel that there is no recession possible from the demand of the public and of the Council for a consolidation of the licensing medical bodies, with a view to the enforcement of an equal minimum standard in each division of the kingdom. Next to Sir JAMES PAGET'S speech, and little inferior to it, was that of Dr. HUMPHRY. Among the speeches against Dr. HUMPHRY'S motion, the best were Dr. ANDREW WOOD'S and Professor TURNER'S. But they were inadequate. They entirely failed to show that the Scotch bodies, or their examinations, would be injured by being compelled to conjoin for the purposes of a minimum examination. Dr. ANDREW WOOD'S panegyric on the Council was overdone. The Council is too young a body and it has too much to answer for yet in the way of rejections at examinations to be so vain and self-complacent as he would make it out to be. Professor TURNER laboured hard to show that uniformity was not the law of nature, and should not be recognised in the matter of examinations. It is a curious use of the variety of nature to draw from it an argument against effective examinations. Surely you may use tests to ascertain that a man's knowledge does not fall below a certain point without being chargeable with advocating a dull uniformity. It is time this argument was allowed to rest. Professor TURNER generously gave the credit of it to Dr. PLAYFAIR, and it has had very much more attention than it deserves. We were disappointed to hear Professor TURNER resort to it. From the emphasis he laid on it, he evidently was deficient in better ones. At any rate it is simply preposterous to argue that because nature abhors uniformity men shall have different views about the composition of the blood, or the course of the femoral artery. These are matters on which, with all respect for the variety of nature, it is right to require identical views on the part of students in Edinburgh, London, and Dublin. The plain fact is the Scotch bodies are ill-advised in resisting general opinion on this question, as expressed by the division in the Council, in which five out of six of the Crown members voted for compulsory conjoint boards. They do a great deal of good work in educating those who afterwards practise in other parts of Great Britain and Ireland. As Professor TURNER powerfully showed, they are educating about 2000 medical students, a large proportion of whom they also examine and license to practise, not in Scotland merely—then it would be a mere Scotch question,—but in England and the whole of Her Majesty's dominions. There is no longer any territorial limitation of the right to practise. The attitude of the Scotch bodies, whether universities or corporations, under these circumstances, should be one of readiness to accept any imperial measure for securing what is a matter of imperial interest—such simple arrangements for minimum examinations as admit of being easily supervised and certified as efficient and above all suspicion. The Scotch bodies can afford not to show jealousy and fear of such measures. At present they figure discreditably. "The Scotch difficulty" is construed very unfavourably, and sometimes very unjustly, to the Scotch schools; but they have themselves to blame for it. What should add to their compunctions is that they have placed the Duke of RICHMOND and GORDON in a very unenviable position. He may well say, "Save me from my Scotch friends." But for them he would have had satisfaction in bringing forward a measure which in its main provisions would have had the support of the profession and the public. Now he must either alter it *in toto* or abandon it altogether. This is the plain meaning of the telling speech of Lord RIPON on Monday night, of the division in the Medical Council, and of the unmistakable demand of the profession, which will soon make itself heard in Parliament. The changes in the Bill asked for by the Council are like so many shots through the Bill. They ask for the compulsory principle to be applied in regard to conjunction of Boards. This is shot No. 1. The Council, on the motion of Dr. PITMAN, respectfully declines to initiate examination rules, as suggested by Section 14, which really is a vital feature of the Bill, and was necessitated by the weakly permissive way in which the bodies were allowed to do that which it was ascertained they would not do. This is shot No. 2. The Council declines to undertake to originate a new scheme for examining dentists. This is shot No. 3. There are other smaller holes made in the Bill, but the principal ones, made by what we have called the first two shots, have their origin in "the Scotch difficulty." The failure of another medical Bill would be a misfortune involving considerable responsibility. This meeting of the Council will cost a great deal of money. The English scheme for conjunction is imperilled; all medical students are distracted by the uncertain condition of the examining system. For our own part, we see some advantages in another failure. None of the measures, not even Lord RIPON'S, was thorough enough to meet the case, as we understand it. There is a growing conviction that a little more obstinacy on the part of "the bodies," and we shall get three, perhaps even ONE examining board for the whole kingdom, independent of all the corporations and universities. Dr. APJOHN, one of the most respected, albeit one of the quietest, members of the Council, actually had a motion in this direction on the programme for Monday, though it was withdrawn. Such a plan is our hope and expectation. But it will scarcely be the hope of the bodies which by their obstinacy are inviting legislative

changes, that, as Sir JAMES PAGET said, will abolish their right of representation on the General Medical Council, if not their existence.

CONGENITAL absence of one kidney is a malformation of more than usual indirect interest. Its causes are as obscure as those of most other developmental errors, but the associated conditions are, in some instances, very curious, and its consequences frequently of great moment to the individual. Whatever may have been their origin, there can be no doubt that the presence of double organs saves us from many of the grave consequences of local disease, and the resulting advantage is strikingly brought out by a study of the effects of the experiment which Nature at times performs, of substituting a single organ, however efficient, for the double organ which she usually provides.

In the current number of VIRCHOW'S *Archiv* Dr. BEUMER has collected from various sources forty-eight cases in which one kidney was congenitally absent, and has carefully compared the conditions, associations, and effect of this malformation. This number of cases is considerably greater than any previous writer has collected, and the conclusions drawn from them possess corresponding value. From the circumstance that these cases were all recorded within the last twenty-five years, the condition, although uncommon, is not of extreme rarity. In forty-four out of the forty-eight the kidney was entirely absent; in four it was rudimentary. The organ appears to be absent as often on one side as on the other, since in twenty-one cases the defect was on the right side, and in twenty-two it was on the left. It appears to be of more frequent occurrence in the male than in the female sex, since, of thirty-nine cases in which the sex was mentioned, twenty-six were males, and thirteen were females. It must be remembered, however, in estimating the value of this difference, that the number of post-mortem examinations upon men is larger than upon women, and the condition can only be diagnosed by an autopsy. When observations have been made upon the state of the vessels, they have been most commonly absent. In one case, although the kidney was wanting, a rudiment of the renal artery existed, passing into the cellular tissue. In one case in which a rudimentary kidney existed, incapable of function, the renal artery did not exist. Similar variations in the condition of the ureter have been observed. In most cases the duct was entirely absent; in a few the portion of the ureter adjacent to the bladder alone existed. Of the bladder, one angle of the trigonum was absent in some cases, or the sulcus in which the ureter opens could not be detected on the side on which the kidney was wanting.

In most of the cases in which the kidney was absent the suprarenal body was present. In two cases it appeared to be enlarged, but it is probable that the apparent enlargement was the effect only of the change in shape consequent on the absence of the organ on which it is moulded. FÖRSTER asserted that the suprarenal body is always present in these cases of congenital absence of the kidney, and his statement has been generally accepted as correct. In five of the cases collected by BEUMER, the suprarenal body was also absent. In one of these cases, recorded by SCHEIBER, there was a bicornuate uterus, and closure of the anus, the rectum opening into the vagina, between the caruncule myrtiformes. The subject of this curious malformation lived to the age of thirty years, and died of cerebral tumour.

This coincidence of an arrest of the development of the sexual organs with the defect of the kidney was not unfrequent, and constitutes one of the most interesting teratological points in the study of the malformation. The sexual malformation was present in thirteen cases, nearly a third of the total number; eight were females and five males. Of the latter cases, in one there was simply a diminution in the size of the corresponding vesicula seminalis and vas deferens; in another case the vesicula seminalis on that side was absent, and the vas deferens and testicle were small; and in another the corresponding testicle, with the vas deferens, was absent. In an interesting case recorded by EPPINGER, in which the right kidney and ureter were rudimentary, although the male sexual organs were normally developed, there was, on the right side, a half vagina, an inch and a half in length, and a corresponding uterine cornu, an inch in length. In females, the associated irregularities of the sexual organs were more frequent, both absolutely and relatively, and they were also more considerable. The uterus was the organ which had most frequently suffered. In a few cases the whole of the sexual organs on that side were absent—the ovary, half the uterus, and half the vagina. In several the uterus was unicornuate, the half of a bicornuate uterus being absent on the side of the defect. In some cases in which a bicornuate uterus was complete, the vagina was double.

The remaining kidney was, in all the cases, considerably enlarged, and increased in weight and size; and with this increase was a corresponding development of the vessels and ureter. In twenty-six of the cases this enlarged kidney was perfectly healthy, and of these no less than eleven were over thirty years of age. This is a fresh and striking proof of the completeness with which the one kidney can carry on the functions of the two, without suffering degeneration in consequence of its increased work. But in no less than twenty-two of the cases the remaining kidney presented evidence of disease—an equally clear indication that the increased work, although entailing no necessary degeneration, does involve an increased liability to disease. In most of these patients the disease of the kidney was the immediate cause of death. The most common condition was chronic inflammation. It is evident that such disease could be borne for a short time only; and this the details of the cases prove, since in many of them the bladder was completely empty, anuria having preceded death. The frequent occurrence of calculi in the pelvis of the kidney and ureter is worthy of note; they were found no less than ten times. This frequency is a point of much physiological interest in connexion with the excretion of uric acid and the functional power of the single kidney. The danger of the condition in such patients is obvious, and is shown by the records of many of these cases, since in no less than five a renal calculus stopping the ureter caused complete obstruction and all the consequences of retention of urine in the kidney, including rapid death.

The pathological aspect of these cases is alone the subject of BEUMER'S paper, but his facts suggest clinical applications of some importance. To one only of these we may

allude. It has been remarked that the morbid state can only be recognised on the post-mortem table, but the association with defects of the sexual organs suggests the possibility of suspecting its existence during life. In many such cases the enlarged single organ might be felt. The occurrence in such patients of evidence of chronic Bright's disease without recognisable cause, or of grave symptoms succeeding those of renal colic, and even the occurrence of renal colic on the side opposite to that on which there exists a sexual malformation, might in some cases lead to a correct suspicion of the existence of the renal defect.

THOSE who listened to the debate on the second reading of the Medical Bill of the Duke of RICHMOND on Monday must have been gratified in one respect—viz., with the distinct way in which the principal points of medical reform were stated by the Marquis of RIPON. The great difficulty in the way of the proper settlement of this subject is in the technical and complicated nature of it; but after the able and lucid statement of the Marquis of RIPON the House of Lords will have a clear notion of the difference between one portal to the profession and nineteen portals. There were not many of the public to hear the discussion, and the debate was shared only by the Marquis and the Duke of RICHMOND. But there was a very fair attendance of Peers, including Lord BEACONSFIELD, and they seemed to listen with great attention to the carefully-constructed and telling speech of the Marquis. He showed good taste in not pressing any premature division on a measure which, as he said, is so contrived as to excite opposition at almost every point. His own measure in 1870, he said, came to grief on the simple point of direct representation of the profession, which he refused to sanction, and which the Lord President, he thought rightly, had also refused to sanction. But in the present Bill there was no end of points which provoked hostility or failed to conciliate. The exposure of the defects of the Bill was complete, especially the absence of clauses for compelling the formation of a Conjoint Board in each division of the kingdom. Next in effectiveness to this exposure was the description of the nature and amount of the disappointment felt at this defect. The adverse opinions of the College of Physicians, of the College of Surgeons, of the Universities of Cambridge and Oxford, and of the Medical Council, and last, though not least, of the public, were delivered with most merciless clearness. The reply of the Duke of RICHMOND was that of a minister who was conscious that deadly blows had been dealt at his Bill, none the less deadly for the courtesy which permitted the second reading without a division. It may be in the power of the Government, with its great majority, to pass a Medical Bill in opposition to the views of the medical profession, the Medical Council, and the English medical authorities. But we doubt whether even the present Government could do so. Even if it could we feel sure that it will not. This, as the Marquis of RIPON said, is not a party question. It is essentially an educational question of great interest to the public. The Duke of RICHMOND and GORDON may have a great respect for the "Scotch difficulty," and may be very anxious to please his Scotch friends. But this is an Imperial question, and should be treated in an Imperial way. Neither the Scotch universities nor the corporations have anything to fear from the compulsory establishment of Conjoint Boards. But even if they had, their fears must not stand in the way of precautions for equality of exaction at examinations, the passing of which is followed by equal rights of practice in every part of her Majesty's dominions.

We confess that we are not sanguine of seeing a Medical Bill passed this session. The defects of this measure are too glaring. But, for all that, we expect the greatest advantage from the discussions already occasioned by the Bill. We certainly have never heard the issues of medical reform more clearly raised than in the House of Lords on Monday night. For our parts, we are not anxious that the measure should pass. It would be a calamity for it to pass without the insertion of clauses compelling the formation of Conjoint Boards. But, as we have said, we cannot believe that the Government would foist a measure with such a defect on Parliament after what has happened. But we are so impressed with the growth of public interest and intelligence on the subject that we believe a little more delay, and perhaps an inquiry into the whole subject by a Select Committee or a Royal Commission, would give us larger measures of reform—such as Examining Boards appointed independently of the Corporations and involving little cost to the candidates, and a Medical Council less redolent of interests and more sympathetic with the profession.

IN an otherwise able and appreciative leading article, the *Daily Telegraph* of Tuesday last misconceives one prominent reason of the dead-lock in the Army Medical Service. Our contemporary assumes that the special examination to which surgeons are subjected before admission to the army is imposed because the State does not regard the possession of an ordinary diploma as adequate proof of qualification for what is strangely described as "the humblest medical capacity." We must leave others to decide whether the medical charge of Her Majesty's troops, upon whose vigour, it should be remembered, the defence of the country may at any moment depend, is service of "the humblest" capacity! Meanwhile it may be well to point out, for the information of a few, what is probably known to most well-informed persons—namely, that the army examination was instituted, and is maintained, to insure *special* knowledge of certain branches of Surgery and Medicine, with the cognate sciences, which are not of much practical value to the civil surgeon, and may therefore be neglected. For example, military surgery, relating directly to the methods of treating injuries such as those likely to be received in battle, is not commonly studied or understood by men not destined for the army; and the like is true of medical matters having immediate connexion with the hygiene of forces engaged in a campaign. It will be obvious to everyone that subjects of this special character must form the topic of examination by "experts," and that the State is not only justified in applying peculiar tests of competency to the qualification of candidates for the service, but would be culpable if it neglected to require a special guarantee of fitness from men who are to be specially employed. Again, it is not, as the *Daily Telegraph* assumes, a just inference from the fact that many candidates for the army fail to pass the board, to conclude that "the present methods of getting placed on the Medical Register must be unsatisfactory, in so far that they put official passports to

medical practice in the hands of men so ill-qualified that the State will not accept their services even in the humblest medical capacity." The fact is notorious that the majority of those who are rejected at the army examinations fail in respect to the particular matters on which they are specially tested. They may be fairly good anatomists, and sufficiently well-informed on topics falling within the province of the civil practitioner, but their knowledge of military surgery is defective; they have not, perhaps, bestowed sufficient attention on that portion of the science of materia medica which consists in the recognition of medicinal plants and the preparation of drugs; or, most likely of all conjectures, the information possessed by candidates on the vital topic of camp management, the avoidance of miasmatic and malarious diseases, and the preservation of health among troops on service, is below that fixed for even neophytes in the Army Medical Department, and therefore they are very properly refused. We have not the slightest wish to underrate the importance of securing men of high culture, and possessed of special qualifications for the army, but it is only fair to point out that those who fail to pass a particular ordeal are not necessarily badly informed on general subjects, or incompetent for the discharge of medical duties among the civil population at home.

The mistake into which our lay contemporary has fallen will be sufficiently corrected by these remarks; but we may embrace the opportunity to ask public attention for a deeper phase of the question. There may well be some reason in the complaint that "one-third"—we are quoting the *Daily Telegraph*—of the men offering themselves for examination by the Army Board are "'plucked' every year because of their deficiency in rudimentary professional knowledge." We repeat it is *not* in the "rudimentary" branches candidates fail; but, waving that point of detail for the moment, it stands confessed on the face of the facts that too large a proportion of the total number examined is rejected! What is the explanation of this untoward circumstance? This significant question, which has been repeatedly asked, and which must form part of the inquiry in progress as to paucity of candidates for the Army Medical Department, will find its answer in the fact that the best men are repelled instead of being attracted by the existing military arrangements. In a word, to echo an old cry, "the service is going to the dogs" so far as the medical profession is concerned, and no one seems to have the will or the wit to save it from hopeless discomfiture. The pay is insufficient, and the meagre promise the War Office holds out is broken, in fact, by the qualifying conditions imposed in its pretended fulfilment. Men are asked to enter upon a career which unfits them for general practice, and destroys their prospect of success in civil life, and after they have resolved upon the sacrifice they are deterred from completing the contract by a closer view of the regulations enforced. The bargain is bad in itself, and it is made worse by drawbacks which have been annexed to the contract since it was originally drawn. We can only hope that the Commission appointed to investigate the failure of medical students to enter the army will subject the situation to an exhaustive scrutiny. The discontent which prevails within the Army Medical Department, and the aversion shown to that service by the profession as a whole, have for their cause deep distrust of a changeful policy and the scant recognition which the claims of medical men as scientific servants of the State are wont to receive at the hands of the military authorities. In another column we print an abstract of the remonstrance addressed by the College of Surgeons of Ireland to the War Office. The plaints set forth therein are well worthy of consideration. They point to grievances which are keenly felt, and which, in fact, exclude good men from the competition, and in some measure at least explain the percentage of rejections by which the lay press is very justly scandalised, but which, through lack of information, it misconstrues and misrepresents.

Annotations.

"Ne quid nimis."

THE COLLEGE ELECTIONS.

ALTHOUGH the election of Fellows into the Council of the Royal College of Surgeons does not take place until July, active steps are already being taken to secure the election of certain presumptive candidates. We gather from the correspondence published in another column, that all the Fellows have been solicited by Mr. Messenger Bradley, of Manchester, to support the candidature of Mr. Lund, the eminent and esteemed surgeon of the same city. The appeal has been generously answered, over three hundred Fellows having signed the requisition. Under such circumstances Mr. Lund could scarcely decline to accept the offer of nomination, although he may regret the zeal by which the preliminaries have been arranged. Indeed, all who know Mr. Lund will sympathise with him in this ill-judged procedure, which amounts to a direct canvass of the Fellows. It may be questioned whether the practice of canvassing for a seat in the Council is or is not on the increase, but there can be no doubt that in any degree it is, as Mr. Pollock has very properly and forcibly expressed it, "derogatory to the profession." The letter which Mr. Curling has addressed to us, also based upon the requisition drawn up by Mr. Bradley, opens up another question which bristles with difficulties. For some years there has been a growing opinion among the Fellows residing in the provinces that their interests require a more direct representation in the Council. While we agree with Mr. Curling that "the interests of the provincial Fellows are equally the interests of the metropolitan," we are unable to hope that the argument will prevail. It should, however, not be forgotten that it is possible for the Fellows in the provinces to jeopardise the interests of the College itself by being too careful of their own. At present one-eighth part of the Council are provincial Fellows, and if the proportion be still further increased, it will be difficult, if not almost impracticable, to carry on the more important business of the College.

POISONOUS TOILET AND NURSERY POWDERS.

IT is unhappily beyond question that not only cosmetic paints and washes, but applications of the class prepared and sold for use on the skin, down to the "innocent" article specially recommended for use in the nursery under the name "violet powder," may contain, or consist of, poisonous materials. A very serious and extensively fatal series of instances in which poisoning has resulted from the unsuspecting use of powder publicly sold as harmless, and proved to contain arsenious acid, has occurred near London, and is now under official investigation. In another column we print a communication from a firm of analytical chemists, who have pursued some independent inquiries. The results

they have obtained go far to prove the existence of a grave peril, to which a large section of the community is daily exposed. We are especially desirous to create no needless alarm in this matter, because dusting powder is in use in every nursery, and may almost be counted a necessary. Nevertheless, in the face of the terrible disclosure now made on the authority of Messrs. Evans and Jones, it is manifest that the "violet powder" sold in the shops must be replaced by some home-made preparation of finely pulverised starch—that made from the potato, by boiling to complete dryness, is probably the purest and the best—or a guarantee of more than common value must be obtained from both maker and vendor before public confidence can be restored. All we at present are prepared to add, on our own authority, is, that it is a fact that cases of the nature described have occurred, and the alleged cause is under close scrutiny. The reports which have reached us issue from several credible sources. The public should be instantly warned. Meanwhile, the practice of using face powder, paints, and washes of all but the simplest home-made descriptions, should be suspended, if not abandoned, as common prudence plainly enjoins.

PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS.

THE rare and interesting case of paralysis of the posterior crico-arytenoid muscles, exhibited by Dr. Felix Sémon at the Clinical Society's last meeting, raised several important questions which hardly met with the discussion they deserved. Apart from the rarity of the case, only a few of which are on record, there are certain physiological and pathological questions involved. The man had nervous symptoms of peculiar character; the gait was that of locomotor ataxy, though it was not stated that the other symptoms of that disease were present; he had also ptosis of the left eye, slight nystagmus, and some inequality of the pupils; and, moreover, slight left facial paralysis. All these symptoms pointed to central nervous disease involving the brain and spinal cord, but probably not one lesion, but several distinct ones. There is certainly the possibility that disease of the medulla oblongata and cord might cause these symptoms, and they would point to some disseminated sclerotic or syphilitic lesion. There is therefore an *à priori* probability that another paralysis would be due to a similar cause acting in a different position. But now the difficulty arose, which was suggested by the President, that other muscles supplied by the same nerve-trunks were not involved, and that the paralysis was bilateral. A little reflection shows, however, that neither of these difficulties is sufficient to prevent the acceptance of the hypothesis of central origin. As we know, palsy of associated bilateral muscles rarely occurs in cases of disease of the cerebral centres on one side only, but this fact only shows the intimate association of the medullary centres—of the laryngeal muscles, for example; an association so intimate that even in grave lesion of the higher centres, the nervous impulse is so transmitted from one nucleus to the other in the medulla oblongata that not even a weakening results. Now, everyone knows that when the recurrent laryngeal nerve is injured, or the vagus nerve-trunk as a whole, unilateral paralysis of all the muscles supplied must result, and this fact alone would negative the idea that the disease could have affected one or both of those nerve-trunks. We thus exclude the possibility of causation either by disease of the nerve-trunks or of the higher cerebral centres. But could such a paralysis be due to a general cause, or to a symmetrical local cause acting on the muscles? General conditions, as we know—chlorosis, lead-poisoning, hysteria—may produce symmetrical paralysis of the laryngeal muscles, usually of the adductors of the cords. But a complete paralysis of the abductors from such causes would, so far as we are aware, be quite contrary to experience, and the supposition of such a cause, if a *vera causa*, would be to introduce a purely hypothetical condition, and to ignore a marked existing one. So that we are driven to consider the possibility of central disease as the cause. Symmetrical paralysis of single muscles or groups of muscles from spinal disease is not only not uncommon, but may even be said to be rather the rule. Thus we see the palsy affecting symmetrically the muscles of the ball of the thumb and little finger in progressive muscular atrophy, usually one side being in advance of the other. Nor are cases unknown in which there has been extension of disease which had commenced primarily in the muscles of one side to those of the other corresponding, although the cord was not primarily affected; and similar cases are recorded of extension of local anæsthesia or hyperæsthesia to the opposite limb. Then comes the question of limitation to one set of muscles, other muscles supplied by the same nerve being unaffected. Here again we are supported by the analogy of other special paralyses. Nor is there anything far-fetched or improbable in the view that for each set of laryngeal muscles there is a separate set of ganglionic centres. Apart from the best known example of opposition of the lateral and posterior crico-arytenoids, there must be constant opposing and balancing movements of each set of laryngeal muscles, to allow of the delicately-modulated actions which are constantly performed. This fact alone would suggest the existence of separate, though intimately associated, centres. Besides the movements in phonation, cough, &c., the vocal cords, as is well known, are slightly separated in inspiration and approximated in expiration, the abductors of the cords being, therefore, more highly specialised than some of the other muscles, and the more probably having even distinct centres. All which considerations render the more likely the view that central disease of the medulla oblongata, or possibly of the pons, was the cause of paralysis, a view strongly supported by the associated nervous symptoms.

FEVER IN ST. PETERSBURG.

ST. PETERSBURG has been recently added to the list of those foreign cities for which the Registrar-General is enabled to publish weekly mortality statistics. Whatever, therefore, may be the general reticence of the Russian Government upon sanitary matters, official weekly returns of mortality in St. Petersburg are furnished regularly to our Registrar-General for publication, and terrible is the commentary they afford upon the sanitary condition of that city. The last return to hand is for the week ending the 30th March, which renders possible a summary of the returns for the first quarter of the year. The population of the city is stated to be 669,741 persons, which entitles it numerically to the fifth place among the capitals of Europe. During the thirteen weeks of the first quarter of this year 9392 deaths are reported to have occurred in St. Petersburg, which were equal to an annual rate of 56·1 per 1000 persons living, or considerably more than double the rate of mortality which prevailed during the same period in London. It appears that of these deaths, no less than 3761, or 40 per cent., resulted from the seven principal zymotic diseases, including 2273 from fever, 979 from diarrhœa, 162 from diphtheria, 121 from scarlet fever, 115 from small-pox, 62 from measles, and 43 from whooping-cough. The annual death-rate from these zymotic diseases was equal to more than 22 per 1000, while from fever alone it was 13·6. Of the 2273 deaths referred to fever, 1029 were described as enteric or typhoid, 739 as typhus, and 505 as "typhus recurrens." We are so used now to look upon an annual death-rate of 1 per 1000 from fever in our large towns as undoubted evidence of hygienic

neglect, that it is difficult to realise what the sanitary condition of a city must be which suffers from an annual death-rate of 13·6 per 1000. The fever-rate in Liverpool in its worst days scarcely ever exceeded 2 per 1000, or less than a sixth of that from which St. Petersburg has recently suffered. The exceptional fatality of diarrhœa during the three winter months is another remarkable feature of the recent mortality statistics of St. Petersburg. The 979 deaths from diarrhœa were equal to an annual rate of 5·8 per 1000, which in most European cities would be a high rate for the summer quarter of the year. The present health-condition of St. Petersburg, judged by its mortality statistics, is of more than Russian interest.

DEATHS BY WILD ANIMALS IN INDIA.

IN this country, happily, the lower animals are a cause of human mortality by their pathological, not by their physiological, relations to man. We suffer chiefly by receiving from them diseases, not by serving as their food, and we are apt to regard an extensive mortality from the direct ravages of animals upon the human race as a thing of the past. The public and the profession are indebted to Sir Joseph Fayrer for reminding them how untrue such a conception is. In a paper read before the Indian section of the Society of Arts, on the destruction of life by wild animals and venomous snakes in India, he has called attention to the fact and illustrated the details of the terrible loss of life from this cause in our Eastern Empire. Twenty thousand human beings and fifty thousand head of cattle are every year destroyed. In the year 1875, this enormous mortality was thus distributed among the different causes:—Elephants killed 61 human beings and six head of cattle; hyænas killed 68 persons and 2116 cattle; bears, 84 persons and 529 cattle; leopards, 187 persons and 16,157 cattle; tigers, 828 persons and 12,423 cattle; wolves, 1016 persons and 9407 cattle; other animals, jackals, alligators, &c., 1446 persons; whilst snakes killed no less than 17,070 persons and 3166 cattle. Fuller statistical details are given of the distribution of this loss of life in the several districts of India, and some facts are mentioned in illustration of the way in which the country is devastated by the scourge. Whole valleys have been at times depopulated, public roads and thoroughfares rendered literally unapproachable by human beings, even in broad daylight, and thousands of acres of once cultivated land have been entirely deserted and relinquished to brushwood and rank vegetation, offering, in their turn, safe coverts to these various animals. Sir Joseph Fayrer points out that more effectual measures are needed to mitigate or prevent this evil. There is reason to believe that the Government has the matter under its consideration, with the view of devising plans by which, with the most efficiency and at least cost, the mortality may be lessened. It is probable, however, that the expenditure of more money is necessary to secure an arrangement competent to grapple with the evil. The problem is one of great difficulty, for the Government cannot do all. It is necessary for the people to bestir themselves, and rely on the resources available, far more than they have hitherto done. The evil can only be expected to cease entirely when predaceous animals are extinct. This end will only be attained, or the deaths considerably lessened, by the people learning to protect themselves, and to employ the resources of improved knowledge and civilisation in their contest with the danger. Prejudice and superstition are terrible obstacles in the way of this reduction of the mortality. As long as men worship, and reverence with awe, the creatures which destroy them, the destruction of the destroyers is a most difficult end to attain. But Sir Joseph Fayrer is hopeful that much more may be done, even with the means at present available. The death-rate from disease, he points out, has been reduced to less than one-third by the application of sanitary laws, and with the same enlightened attention we may anticipate an equally good result in the death-rate from animal predacity. The chief means at present in force for encouraging the destruction of wild beasts consists in rewards for evidence of such destruction. The system appears to have done good, but the field for fraud is very large, and constitutes a serious drawback to the efficiency of the plan. Other means have been suggested—spring guns, poisoning by strychnine and aconite, &c.—and employed with some success. It is recommended that the local government should not only proclaim the rewards, but encourage the work of destruction by the operation of an organised establishment. The rewards for venomous snakes should be increased, and the people should be encouraged to work for the rewards, aided by persons acting under properly selected superiors. "Until some organised establishment is formed, not dependent on the will or subject to the caprice of individuals, but under local officers subject to one head, no real or continuously progressive amelioration of the evil can be expected."

THE WAR-WAVE OF CRIME.

WAR undoubtedly acts as an incentive or stimulant to those sometimes dormant propensities which find their expression in crime. M. Amusat has recently collected and adduced some additional evidence in proof of the familiar fact. The rise in crime which is distinctly traceable to war in some degree accompanies, but more certainly follows, a campaign. In small part it is due to the misconduct of disbanded troops, but the greater element in causation is what, for want of a better term, we shall call the "force of example." It is not, however, a purely *imitative* propensity that incites men and women to reproduce in their own actions the crimes of others. The effect of any great breach of the law of order, such as that which occurs when a war rages or any sensational crime has been committed, is to disturb the minds of all who come within its influence. The manner in which the disturbance shows itself will differ according to the previous state of the individual affected. Those persons who are sensitive will be appalled. Natures with a latent tendency to violence or vice, but which are held in check by the rhythmical order of social law, will, when the restraining influence is withdrawn, display their deeper bias. A very large part of the community is kept to normal social courses by the individual respect for or fear of the social law of order. It needs but the disturbing force of war or crime to weaken this compelling sense of discipline and to let loose the natural passions. The faculty of "imitation" coming into play may determine the form in which the violent and vicious instinct will show itself, but it is the inhibitory effect of the original disturbance that constitutes the first stage in the increase of crime produced by war. The method of working is identical in the case of crime propagated in a community from a sensational tragedy, or offence of any description, which seems to be unaccountably reproduced by weak-minded or vicious imitators.

THE DISSEMINATION OF INFECTIOUS DISEASE BY MEDICAL MEN.

THE medical officer of health for Marylebone, Dr. Whitmore, in his report for February, takes occasion to refer to the question of the dissemination of infectious diseases by medical men. We must take exception to the needlessly vague manner in which he deals with the question. While he states that he may speak with some confidence as to medical men who practise among the upper and middle classes of society carrying out the precautionary measures necessary to prevent themselves becoming carriers of infection, he is unable to speak with equal confidence as to

medical men practising among the poorer classes, there being numerous difficulties in the way of their taking equal precautions. He refers especially to the case of attendance upon lying-in women, and observes: "Every medical man, when in attendance upon these persons, should, if possible, give up his attendance upon patients suffering from contagious and infectious diseases, or if that cannot be done, there should, in the first place, be an interval of several hours between his visits to the latter and the former, and, in addition, his clothes should always be changed." Where are the data which would justify advice of this sort, calculated to excite unlimited alarm among the public? The conditions under which infections are propagated are surely sufficiently known in these days for a medical man to avoid being a carrier, without suggesting that he must virtually close practice. Take the phenomena of the propagation of puerperal fever in the happily now very rare instances in which the medical man is the propagator—propagation probably not more common among the poor than among the rich,—and in what other infectious disease is a like succession of phenomena observed in relation to the medical man? We protest against the vague advice given by Dr. Whitmore, implying, as it does, a liability to the transmission of infectious diseases by medical men of which there is no evidence.

THE ELECTION AT ST. THOMAS'S HOSPITAL.

THE confusion that exists in the public mind respecting what is meant by the Fellowship of the Royal College of Surgeons is strikingly shown in a paragraph in the *Pall Mall Gazette* of Monday last concerning the appointment of an ophthalmic surgeon to St. Thomas's Hospital. We announced last week that Mr. Nettleship was the only candidate that possessed the necessary qualification of the Fellowship of the Royal College of Surgeons. Our contemporary has been informed, "on the best authority," that both the other candidates were equally eligible, inasmuch as they are Fellows of the Edinburgh College. In addressing medical readers it was not necessary to speak of the wide and important differences between the Fellowship of the English College and that of the Edinburgh College, but for the further information of our contemporary we will observe that, besides many differences in preliminary training and education, there is the not unimportant one that candidates for the English Fellowship must pass two very difficult examinations, whereas money and recommendations alone are needed at Edinburgh.

PROFESSOR BALFOUR'S TESTIMONIAL.

A MEETING of Edinburgh graduates was held at the house of Dr. Duckworth on the 15th inst., to promote the above object in London and elsewhere.

It was announced by Dr. McIntosh, F.R.S., of Murthly, that about £250 had been already collected from friends and former pupils of Dr. Balfour. A most excellent portrait of the Professor has been painted by Sir Daniel Macnee, President of the Royal Scottish Academy, and this is to be presented to the Senate Hall or Library of the University. It is desired to procure a replica of this, from the same hand, as a gift to Dr. Balfour's family, and additional subscriptions for this purpose are now sought. A London committee was formed, consisting of the following members:—The Right Hon. Lyon Playfair, C.B., M.P.; Dr. Murchison, F.R.S.; Dr. Crichton Browne, F.R.S.E., Lord Chancellor's Visitor in Lunacy; Sir Joseph Fayrer, K.C.S.I.; E. Chisholm Batten, M.A., Lincoln's Inn; Dr. Allen Thomson, F.R.S.; Dr. Sieveking, Dr. Farquharson, Professor Huxley, Sec. R.S.; Joseph Lister, F.R.S.; Dr. Wm. Playfair, Dr. Priestley, Dr. Ferrier, F.R.S.; Dr. Burdon Sanderson, F.R.S.; Dr. Duckworth, Dr. Lauder Brunton, F.R.S.; Dr. T. Spencer Cobbold, F.R.S.; Dr. Laidlaw Purves, Dr. Potter, Mr. R. Davy, Dr. Grey Glover, Dr. George Harley, F.R.S.; Dr. A. Hughes Bennett, Henry Rutherford, Esq., Inner Temple; Mr. Carruthers, F.R.S., British Museum; Dr. H. Season Wilson, Dr. J. Watt Black, &c. Various secretaries were nominated in the provincial towns, in India, and the colonies.

It is believed that the scheme only requires to be known to the numerous pupils of the zealous and beloved Professor of Botany, scattered all over the world, to ensure a ready response. It was thought fitting thus to mark the kindly services of Dr. Balfour, who had acted as Dean of the Medical Faculty for more than thirty years, and had recently retired from that office.

Subscriptions will be received by any member of the Committee, or may be sent direct to David Smith, Esq., Treasurer of the Royal Society of Edinburgh.

THE SANITARY STATE OF YORK.

THE city of York appears to be so new to sanitary work that it is only now, at the beginning of 1878, that its medical officer of health, Dr. North, can publish his report for 1876 and a part of 1875. The report is instructive, as it shows that York may make itself, if its sanitary authority wills, one of the healthiest, as it is one of the most interesting, cities in the kingdom. With an average annual death-rate of 22·3 for the three years 1874-75-76, and with very great capabilities of sanitary improvement, York has a great hygienic future before it if it will submit to be guided. And there are indications that it is prepared to do what is needed for the health-welfare of its population. We learn from Dr. North that there is some intention of the Artisans' Dwellings Act, 1875, being put in operation with respect to a part of the city incurable under existing conditions; but, on the other hand, we learn that the city still retains a midden system. Dr. North observes: "It would be well that York should set an example of what ought to be done in this matter. Cleanliness in the widest sense is the aim of all sanitary regulations. This simple truth can never be rightly appreciated and acted upon so long as the midden is a part of our domestic arrangements." We should be quite content if York would follow the excellent example set her in other northern towns in this respect—as, for example, Rochdale, or Manchester, or Hull, if she will not (as she should do) adopt a watercloset system proper. But we must not expect too much from a cathedral town. Chapters, as we all know, sit too generally as an incubus upon sanitary work. We congratulate York, however, upon its medical officer of health; for it is quite obvious, from his report, that Dr. North is doing his duty thoroughly and thoughtfully.

THE DENTAL PRACTITIONERS BILL.

THE fate of this measure still trembles in the balance, and it is impossible to feel much sympathy for the anxiety of its promoters. Unless the amendments set down on the paper by Mr. Adolphus Young are adopted, the Bill cannot surely, in justice to the great body of duly qualified medical practitioners registered under the Medical Act of 1858, be allowed to pass. It would have the effect of creating, or giving the sanction of law to, a class of pretenders, some of whom, with an adroitness worthy of a better object, describe themselves by such titles as "Surgeon and Mechanical Dentist," leaving the public to infer that they are qualified as "surgeon," and practise as "mechanical dentist" from choice. This crying evil—the peril of misrepresentation, which must always attend the use of descriptions like "Surgeon-Dentist," "Dental Surgeon," "Surgical Dentist," or "Surgeon &c."—must be stopped. We are not greatly concerned that the object should be gained by passing this particular Bill, but the end

must be reached. The dentists demand a Register, and we think they are entitled to any protection such a list will afford, albeit it may place some in undesirable association. It is, however, an indispensable condition of the reform they ask that, whether by the Bill introduced by Sir J. Lubbock, or by that of the Duke of Richmond and Gordon, the assumption of misleading titles should be interdicted, and that the particular titles to be avoided shall be specified, so as to place them beyond the perils of interpretation by Courts ruled by precedent and learned—only in the law.

THE SOLIDARITY OF THE BRITISH MEDICAL ASSOCIATION.

THE friends of this Association should endeavour to procure more harmony and co-operation between the several parts of its somewhat complex body. Of late the appearance of *imperia in imperio*, and a want of sympathy, has been painfully public and injurious. Professor Turner, in the Medical Council on the 11th inst., thought it necessary to ask if the Medical Acts Amendment Bill, referred to in the letter of Dr. Waters, the chairman of the Medical Reform Committee of the Association, had been promoted by the general body of the Association, or only by the Medical Reform Committee. We cannot doubt that in this case, at least, Dr. Waters represents the great bulk of the Association and of the profession. But the very question is indicative of some doubt as to whether there is not some other party in the Association pulling the strings in another direction. The division of action and opinion on the admission of women to the Association is too recent and obvious to need comment. The existence of various parties, with their respective centres, one at London, another at Birmingham, and another at Chester, at one of which places views may be carried that would stand no chance of acceptance at another, is a state of matters that may have its convenience, but is certainly not likely to conduce to the influence or the harmony of the Association.

FEVER IN CORK.

"Of the ten thousand houses in Cork one-half only have closets, and one-fourth have neither closets, privies, nor ash-pits. The entire sewerage of the city in the important matters of ventilation, provision for floods and tidal pressure, &c., is defective . . . . two thousand four hundred houses have no connexion with sewers; two thousand are within one hundred feet of public sewers, and there are 2328 whole families who live in single rooms." The words we have quoted are taken from the medical report of the Cork Fever Hospital and House of Recovery for the year 1877, by Dr. H. Macnaughten Jones, and form a grave charge against the municipal administration of the city. Under such conditions as have been depicted, it will not surprise anyone to learn that fever last year was very rife, and carried off a large number of victims. The statistical information embodied in the report is of considerable interest: 147 typhus cases were admitted into the hospital, of whom 12 died; 150 typhoid, of whom 17 died; 87 cases of continued fever, all of whom recovered; while 26 cases of erysipelas and 24 of measles also came under treatment, the mortality being respectively 1 of the former and 6 of the latter. No case of small-pox was admitted. Summarising the annual statistics presented in the report, three noticeable features are made prominent: the marked increase of typhoid admissions; the occurrence of a somewhat large number of erysipelas cases, and the prevalence of an epidemic of measles during the latter part of the year, the entire number of admissions of the latter disease taking place in October and November. The number of enteric fever patients admitted into the hospital does not probably nearly represent the actual amount of the disease prevalent in the city. The increase in this particular morbific scourge is serious, and strongly enforces the warnings which have been conveyed to the corporation, from time to time, regarding the sanitary shortcomings which it is in their power to rectify. One recommendation made in the report is so obvious a necessity, and can so easily be carried out—viz., the appointment of a medical officer of health—that the authorities have no excuse for further procrastination in the matter. Other suggestions of not less consequence are urged on the consideration of the corporation, and, if carried out, must result in a limitation of the incidence of the zymotic disorders which proved so formidable last year. The report, we should state, is lucidly arranged, and is embellished with a fever chart.

OVERCROWDING.

MR. JOHN LIDDLE, in his report for the fourth quarter of 1877, in the Whitechapel district of the metropolis, has some observations on overcrowding which bring out in a remarkable manner the difficulty of sanitary administration in parts of this vast overgrown capital. Out of the 8313 houses which lie in the district over which Mr. Liddle exercises supervision as medical officer of health, not less than 4500 are let out as tenements—that is, for occupation by two or more families—and many of these, it would appear, are let by the room, each room containing a family. But the difficulty of dealing with overcrowding, in amount such as is indicated by these figures, is augmented by the kind of occupants. It would appear that there has recently been a large immigration of foreigners, principally from Poland, into East London. These foreigners arrive in a state bordering upon destitution, and are received by their countrymen, who usually possess but little more means, but who give them shelter, even to a portion of their own room it may be, until the new-comers can get work. This gives rise to most unmanageable states of overcrowding and other unhealthy states. A curious movement of the population has taken place in Whitechapel. The English and Irish, who formerly lived in the district to which the Poles chiefly flocked, have gone elsewhere, and a tendency of different nationalities to isolate themselves in separate quarters has become manifest. Mr. Liddle sees in this immigration of almost destitute people from the Continent into East London a serious and difficult social problem. It has complicated extremely the sanitary administration of the districts inhabited by the foreigners, and he appeals for help to voluntary organisations, such as were established in 1848, and during the cholera epidemic of 1866. But it must be obvious that the poverty of the immigrants interposes a most formidable obstacle to effective sanitary relief whether public or private.

SANITARY SCIENCE IN SOUTH AFRICA.

A SPECIAL article with this heading appeared in the February number of the *Cape Monthly Magazine*. It is, in fact, a descriptive and critical notice of the report of a committee that sat last year in Cape Town by order of the Colonial Government, to take evidence on the sanitary state of the towns of South Africa, and to determine whether Government aid or interference would be desirable in order to bring about a better state of things. The evidence, which referred chiefly to Cape Town, was of a very exhaustive character. It was elicited—(1) that no reliable registration of deaths existed, so that the rate of mortality cannot be ascertained, although it was recently stated in a Cape journal to have at one time reached 90 per 1000; (2) that the average allowance of water to each person in the town is twelve gallons per head (this small quantity has been lately reduced); (3) that the town is in some places under-

drained, in others surface-drained, and in many others not drained at all, that the underground sewers open nearly at a dead level with the beach, and that "the Town Council has not the power to connect the sewage with drains." As the *Cape Monthly* remarks: "It may be fairly asked for what purpose the drains were constructed." The last chief material of evidence related to the removal of excreta, the arrangements concerning which appear to be most miserably deficient. Filth of all kinds remains in heaps at the corners of the streets for several days together, rags and rats lie about until they are pounded up by the wheels of the vehicles, fish-heads and entrails are systematically deposited in the streets, and so on.

The article, after describing in general the provisions of the Public Health Act, 1875 (England), explains in some detail that the water-supply could, without difficulty, be made constant, and that, in a place situated as is Cape Town, the "separate system" of drainage was well worthy of special consideration. We entirely concur in the remarks, and trust that Sir Bartle Frere will, when the war and ministerial difficulties are over, again rouse the citizens of Cape Town to some sanitary action, as this capital ought undoubtedly to rank among the healthiest in the world.

DISEASE IN PAUPER SCHOOLS.

THE condition of the parochial schools under the management of the various boards of guardians in London cannot be regarded as quite satisfactory. That scourge of such institutions, ophthalmia, seems to be rarely absent from many of them, and it does not appear that systematic efforts are made to eradicate the disease. Again, cutaneous disorders are frequently very prevalent in the schools. On a recent visit which Dr. Bridges, one of the Local Government Board inspectors, paid to the West London Schools (Paddington), he found that out of 140 children in the establishment nearly fifty were under treatment for skin eruptions, while in the infirmary there were twenty similarly affected. It was observed that children with sore eyelids were allowed to mix freely with others. No measure other than thorough and complete isolation will purge the schools of the evils described.

DEATH FROM NON-VACCINATION.

WE are glad to see Dr. Hardwicke following in the footsteps of Dr. Lankester in holding inquests over cases of unvaccinated children dying from small-pox; though, by the way, for this purpose he should instruct his officer to secure the attendance of revaccinated jurymen. In such a case at the Islington coroner's court on Saturday last, the jury were of opinion that the parents had acted wrongly, and agreed that the death from small-pox was accelerated by the neglect of the parents in not having the child vaccinated. The features of the case are so clear that in point of fact the neglect is criminal. We have recently heard of an instance of three children being dead in one house from small-pox. The maternal parent had contrived, by constantly changing her place of residence, to evade the vaccination laws. She has now the satisfaction of knowing that her three unvaccinated children are all in their graves, blessed martyrs to her views of freedom and hygiene.

DENTISTRY EXTRAORDINARY.

THE horrors of teeth-stopping, with the preliminary gouging and filing, are to many the most unpleasant of the sufferings which dental necessities impose. Many persons prefer the pain of extraction, and to get rid of the offending member, to the annoyance of stopping. In future it would seem they may take their choice without the necessity of a sacrifice of the tooth if they prefer extraction. Dr. Weil, of Munich, has employed and advocated the method of first extracting the tooth, stopping it with amalgam or gold, and then replacing it. He states that the results are excellent, and the teeth can be freely used. He keeps the tooth out of the socket for one or two hours, as may be necessary, and yet the tooth ultimately is firmly fixed. He finds the method quite applicable to both bicuspids and molars. Since extraction can be performed under anæsthetics better than stopping, many persons will prefer the new method to the old, provided (and that is probably the doubtful point) the subsequent refixing does not involve more than complementary pain, and provided also the method is found as successful in other hands as in those of the inventor's.

THE HAMPSTEAD HOSPITAL AGAIN.

WE regret to see that the subject of the Hampstead Fever and Small-pox Hospital is again to be revived by an action brought against the managers of the Metropolitan Asylum District by Sir Rowland Hill and others for damages for the alleged nuisance caused by the presence of the hospital. At present the only way in which it has been made public is by an application to the High Court of Justice for leave to administer interrogatories to the defendants as to certain points of alleged mismanagement. It would, therefore, at the present moment, be highly improper to discuss the grounds of the action, or express any opinion as to the merits of the case. But on all grounds it is greatly to be regretted that such an action should have been brought, and the long-discussed question reopened. Very large damages, amounting to over £30,000, are claimed by the plaintiffs, but the damage which will be caused to property by the renewed agitation upon the subject will, we believe, far exceed that amount. When the trial is over we shall be at liberty to discuss the case upon its merits. Those who are interested in the matter may refer to our report published Dec. 19th, 1874.

THE CHELMSFORD CASE OF HYDROPHOBIA.

CURES of hydrophobia are so rare that scepticism is naturally excited as to the correctness of the diagnosis of the disease in cases which get well. It is necessarily so with all commonly fatal diseases. The cases which recover, if genuine, are usually of milder type than those which do not, and in all cases of disease of mild type the most characteristic symptoms are often absent, and hence there is room for doubt regarding the nature of the case. It is so with regard to the instance of supposed recovery from hydrophobia which has been recorded in the newspapers as having occurred in Chelmsford. The man's symptoms were not severe, continued for several weeks, and subsided. The opinion of those who have seen the patient has apparently been divided as to its actual nature, and the case cannot, therefore, be considered as conclusive regarding the curability of the disease.

THE profession will be glad to learn that a movement is on foot for procuring a portrait of Mr. Robert Ceely, of Aylesbury, to be placed in the Board-room of the Bucks County Infirmary. Mr. Ceely was one of the originators of the infirmary. He was associated in this work with Sir Harry Verney, Bart., and the late John Lee, Esq., of Hartwell. Mr. Ceely is still one of the surgeons of the infirmary, and, we are glad to add, still in active practice. There are few practitioners, either metropolitan or provincial, who live more honourably in the esteem of the profession, for work of equal interest, whether viewed in respect of its scientific value or its human importance. It is only due to the Rev. Joshua Greaves, vicar of Great Missenden, to say that this creditable movement was suggested by him in a letter to the editor of the *Bucks Herald*.

A CORRESPONDENT, writing from the Cape on the 19th ult., says:—"Medical men are still very much wanted in Cape Colony and the other states of South Africa. The Colonial Government offer two guineas a day for surgeons to do duty at the front, and some allowance for forage is also provided. The scale is not specially liberal where everything in the shape of provisions is very scarce and dear, but those who serve in the Kafir war are likely to have a prior claim to any good district surgeoncies that may hereafter become vacant. Some of these latter appointments are worth from £200 to £300 a year. Very little rain has, as yet, fallen either near Cape Town or in Kreli's country. King William's Town is very unhealthy in consequence of the drought and the absence of all systematic sanitary arrangements, and so typhoid has become epidemic. Dr. Hartly is about to be appointed principal medical officer to all the colonial forces. This will be a very difficult post to fill, as each 'Burgher' corps practically claims to arrange its own medical affairs as well as commissariat, and every commanding officer does pretty well that which is right in his own eyes."

THE revised rules of the Manchester Infirmary are at present under consideration, and the clause referring to the qualifications for the office of physician threatens to give trouble. By the new rule it is decreed that every candidate for the office shall be a fellow or member of the College of Physicians, and shall have spent one year at the university where he graduated. It is felt that this residential clause is harsh and unwisely restrictive, as it would exclude many of the ablest physicians in the country. It is all the more to be regretted that the board adhere to this clause, as a majority of the Medical Committee decided against it. The retention of the objectionable feature strongly suggests some unfair and occult influence brought to bear upon the board by the minority, but there is reason to believe that it will not be allowed to pass without an appeal being made to the general body of trustees at the meeting called for the 26th inst., to confirm, reject, or modify these new rules.

AT a special meeting of the Dublin Sanitary Association, held on the 11th inst., it was resolved that the Executive Committee should communicate with the Chief Secretary for Ireland, asking him to receive a deputation from the Association, in order that a public inquiry might be instituted into the present insanitary condition of the city. If an inquiry under the Local Government Board is held, the evidence given must show, what is already well known, that the present unhealthy condition of Dublin is due to bad drainage, insufficient ventilation, unhealthy dwellings, uncleanliness, and general neglect of proper sanitary regulations.

THERE was a still further rise in the mortality-rate of London last week, having been 27·6, against 27·4 in the week preceding. The deaths numbered 1895, and included 58 from small-pox, 40 from measles, 36 from scarlet fever, 9 from diphtheria, 157 from whooping-cough, 32 from different forms of fever, and 14 from diarrhœa; the seven principal diseases of the zymotic class thus accounting for 346 deaths, 108 above the corrected weekly average. To diseases of the respiratory organs 497 deaths were attributed.

SMALL-POX appears to be increasing in the metropolitan district. It has been found necessary to reopen the hospital situated at Deptford for the reception of cases, and the number of small-pox patients in the Metropolitan Asylum Hospitals is steadily augmenting. It is reported that the disease has broken out in the barracks at Chatham. The place is full of military and workpeople, and it is to be feared that a serious epidemic will ensue if some very stringent regulations be not adopted.

AT the meeting of the Hunterian Society, which will be held in the London Institution, Finsbury-circus, on Wednesday, April 24th, Dr. B. W. Richardson, F.R.S., will read a paper on "The Practice of Total Abstinence from Alcohol in Health and Disease." The President and Council desire that any member of the profession interested in the subject may be present to hear the paper and join in the discussion.

MR. THOMAS JESSOP, the President of the Sheffield Hospital for Women, is about to hand over a new building completely furnished for use, the cost of which, we understand, will be about £30,000. Miss Johnson, of Spalding, bequeathed £30,000 for the building of a hospital in that town, and £3000 to the Lincoln County Hospital.

WE observe with satisfaction that on the resignation by Mr. Wilkes of his office as a paid Commissioner in Lunacy, Dr. Rhys Williams, the resident physician at Bethlem Hospital, has been appointed to the vacant post. Mr. Wilkes becomes an honorary commissioner.

DRS. EDGE and REED have been elected physicians to the Salford Hospital, and Dr. Boddy and Mr. S. Buckley assistant-physician and assistant-surgeon to the Clinical Hospital, Manchester.

MR. EDWARD NETTLESHIP has been elected Ophthalmic Surgeon to St. Thomas's Hospital, in place of M. Liebreich, who has resigned.

Correspondence.

"Audi alteram partem."

THE COUNCIL ELECTION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Will you be kind enough to read the enclosed correspondence relative to the coming election for the Council of the College of Surgeons, and give it space in your next number, with any remarks you may think proper to make on the same.—Yours faithfully,

Grosvenor-street, April 11th, 1878. GEORGE POLLOCK.

Letter to Mr. Pollock.

Edinburgh Chambers, 12, King-street, Manchester.

DEAR SIR,—There is a strong desire on the part of many distinguished Fellows of the College of Surgeons to see Mr. Lund elected to the forthcoming vacancy in the Council of the College as a representative of provincial Fellows.

He has for many years occupied a prominent, and of late a foremost, place among surgeons in Manchester, and for more than a quarter of a century has been actively engaged in lecturing and hospital work.

His position in the scientific world, and his many and valuable contributions to surgical literature, are too well known to need mention by me. Sincerely hoping you may be induced to sign the enclosed memorial,

I am, my dear Sir, yours truly,

April 5th, 1878. S. MESSENGER BRADLEY.

Requisition to Mr. Lund.

12, King-street, Manchester.

DEAR SIR,—We, the undersigned Fellows of the Royal College of Surgeons, respectfully hope that you will offer yourself as a candidate for the forthcoming vacancy in the Council of the College, feeling a just confidence that your acknowledged eminence as a surgeon, and wide popularity both in London and the provinces, will ensure a successful issue to the contest.

We are, dear Sir, yours faithfully.

Copy of letter from Mr. Pollock to Mr. Bradley.

36, Grosvenor-street, W., 11th April, 1878.

DEAR SIR,—I beg to acknowledge the receipt of your circular relative to the election of Mr. Lund to the Council of the College of Surgeons. In reply, will you allow me to

state that I have always steadily refused to be nominated for the Council, as I consider the "certificate of character" required by the charter, and the usual canvassing that takes place prior to the elections to the Council, derogatory to the profession.

The College of Physicians does not require or permit anything in the shape of the former, and would condemn, if not punish, anything approaching the latter.

The canvassing that has been permitted and undertaken for some of the candidates for seats in the Council is really a disgrace to the Fellowship.

Entertaining the feelings I do, you will understand my objection to signing any paper in reference to the coming election on behalf of any candidate. No one will be more pleased to see Mr. Lund a member of the Council than myself. I have the highest appreciation of his work and worth as a surgeon. But in my opinion, whatever that may be worth, his election should not be dimmed by private or public solicitation of votes.

I think this subject one of so much importance that I have enclosed copies of the correspondence to the medical journals.

Believe me, yours faithfully,

S. Messenger Bradley, Esq. GEORGE POLLOCK.

To the Editor of THE LANCET.

SIR,—I request the favour of an insertion in your journal of a copy of a letter which I have addressed to Mr. Bradley on the subject of Mr. Lund's candidature for election into the Council of the College of Surgeons.

I am, Sir, your obedient servant,

Grosvenor-street, April 13th, 1878. T. B. CURLING.

20, Grosvenor-street, Grosvenor-square, April 13th, 1878.

DEAR SIR,—I regret that I am unable to sign the paper you have sent me inviting Mr. Lund to become a candidate at the next election to the Council of the College of Surgeons.

Mr. Lund's position as a surgeon, and his contributions to surgical literature, I cordially agree with you, entitle him to the confidence of the profession, but they do not give him a claim to election on the College Council in preference to many of his seniors in the Fellowship, amongst whom I may name Mr. Lister, Sir Henry Thompson, Mr. Callender, Mr. Hulke, Mr. Heath, Mr. Durham, and Mr. Hutchinson.

There are already three provincial Fellows on the Council, and if the number be increased there may be difficulty in getting the business of the College transacted. Members of the Council residing at a distance from London are not usually elected on important committees, from a desire not to put them to the serious inconvenience of attendance; and they are practically ineligible for the higher offices of president and vice-president, who are expected to attend all committees.

Even if there were not several Fellows from the provinces on the Council, I should demur altogether to the reason you give for Mr. Lund's election as a representative of the provincial Fellows. The Council know nothing of class interests. The interests of the provincial Fellows are equally the interests of the metropolitan.

I am, dear Sir, yours faithfully,

S. M. Bradley, Esq. T. B. CURLING.

The requisition printed on previous page (signed by 321 Fellows) was presented to Mr. Lund on Tuesday, April 16th. Mr. Lund replied as follows:—

GENTLEMEN,—The fact that more than 300 Fellows have signed the requisition presented to me to-day asking me to consent to be nominated as a candidate at the next election of members of the Council of the Royal College of Surgeons of England leaves me no alternative but to accept, with many thanks, the compliment thus paid to me, and to accede to the request contained.

This request has been tendered so much earlier than I had expected that I fear in your anxiety to carry out speedily the wishes of my friends you may seem to have overlooked the names of other Fellows of our College whose claims to such a post of honourable trust are quite equal to my own; but I hope the good sense of the constituency to whom I have to appeal will not permit my cause to suffer through any excess of zeal in its supporters.

Very truly yours,

EDWARD LUND.

"INSANITY IN ITS LEGAL RELATIONS."

To the Editor of THE LANCET.

SIR,—I have read with great interest the essay in your last issue, of Dr. Bucknill, on the subject of "Insanity in its Legal Relations." I should wish to correct one error in regard to my own connexion with the subject as a witness before the Capital Punishment Commission. I was never a prison chaplain; I had, however, been a visiting magistrate of a county prison, in which were confined two or three prisoners who had been acquitted on the ground of insanity of capital offences, who, however, were anything but insane. I had also acted for some years as one of three inspectors appointed to visit an asylum for the insane of the higher orders, belonging to private proprietors. I had—as I testified—taken for many years a great interest in the treatment of the insane. It was on this account I was summoned as a witness. I have also reason to believe that it was known that I had undertaken at my own cost the defence of Preedy, the young man who was hung for the murder of a warder at Portland Prison, whose sad history had become known to me.

I had the satisfaction, if my memory does not fail me, of reading in your columns a very flattering comment on the evidence I gave on the subject of insanity in its relation to the law.

Since the date of my evidence, I have followed closely the curious and, to me, most unsatisfactory method by which it is still sought to establish the sane or insane condition of criminals on trial. I remain satisfied that many are found wrongly insane, some are held sane who are not so. I believe it to be utterly impossible to—as the law now stands—define with any real approach to perfect accuracy questionable cases of brain disturbance. Dreams are scarcely sane—who does not dream? Do not some men have in dreams the most violent disposition; are they not (in dreamland, sometimes) had such land law, guilty to any extent? It is well seen that "experts" can be retained, as barristers are, to do their best to prove the allegations of "the brief."

There may be objections to the plan I pray for, but I wish I could live to see it tried—viz., certain experts of high character to be appointed at fixed salaries by the Crown. When it is signified to the high sheriff that a prisoner committed for capital offence is to have insanity pleaded, the sheriff should give notice to the Home Office, who would then send one of these "experts," to act as an assessor with the judge, to advise him how far the evidence given one way or the other is, in his judgment, worthy of acceptance. We should thus at least get some wholesome check on the present very loose system.

Your obedient servant,

Sidmouth, April 15th. S. G. OSBORNE.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF LORDS.

Monday, April 15th.

MEDICAL ACT (1858) AMENDMENT BILL.

On the motion for the second reading of this Bill,

The Marquis of RIPON said it was scarcely necessary to point out the inevitable effect of allowing distinct bodies to confer a title to practise. It was that some of those bodies attempted to underbid the others as to the terms on which they granted their licence. Consequently the public had not the necessary security that the holder of a licence had the minimum qualification which ought to entitle a man to practise as a surgeon or a physician. It was felt very generally that there ought to be but one examining board, or that at most there ought to be only one for each of the three parts of the United Kingdom, through which admission to the practice of medicine could be legally obtained. Since 1858, when the Medical Council Bill was passed, there had been almost continuous but unsuccessful attempts to establish what was known as the conjoint scheme. As the Bill of his noble friend was merely permissive in that respect, it would leave the matter of a conjoint scheme where it had been for the last twenty years. His noble friend had expressed a hope that before the Bill was through both Houses such a scheme would have been established for England, but he had held out no hope that such a scheme would by that time have been established for either Ireland

or Scotland. His noble friend must by this time be aware that the College of Surgeons of London, the College of Physicians of London, the Syndicate of the University of Cambridge, the representative of the University of Oxford on the Medical Council, and a representative of the University of London, had all, in discussing the Bill, pronounced in favour of a conjoint scheme as compulsory under this measure. This was not the case of old corporations wishing to uphold their own privileges, but that of examining bodies who were ready to make a sacrifice of their own independence in the matter of licences to practise and to have a conjoint scheme, provided they were not exposed to the competition of small bodies standing outside that scheme and having power to grant such licences. His noble friend had, no doubt, seen in *The Times* of Saturday a report of a meeting of the Medical Council, held on the previous day, at which a resolution in favour of a compulsory provision for a conjoint scheme in the Bill before their lordships was proposed by Professor Humphry, seconded by Dr. Paget, and carried by a large majority. The resolution declared that nothing short of the compulsory establishment of a joint examining board in each of the three portions of the United Kingdom could be deemed satisfactory. As probably the resolution arrived at by the Medical Council was not in the hands of his noble friend till Saturday, he should not ask him for a positive opinion at the present moment, but he did hope that his noble friend would seriously consider the question between that stage and the committee on the Bill, and would see his way to make it compulsory in respect of a conjoint scheme. His noble friend had a great opportunity of settling an important question, and he hoped he would not avail himself of a political majority to pass a Bill which would be satisfactory neither to the profession nor to the public.

The Duke of RICHMOND and GORDON was glad that his noble friend was not going to challenge the second reading, because if he did so, and he were successful, as he seemed to think might be the case, he would indefinitely postpone the settlement of a question which they all wished to see settled. The history of the Bill was this:—In the month of May of last year he received from the General Medical Council, through its President—of whom one could hardly say too much either from a professional point of view or in reference to the manner in which he discharged his duties as President of that body—a memorial in which he was asked to deal with five points. First, the foreign and colonial degrees; second, the registration of the medical qualifications of women; third, the appropriation of penalties under the Act; fourth, midwives; fifth, the lunacy laws. It was a remarkable fact that the conjoint scheme was not included in that memorial of the Medical Council. He did not say that Council was not alive to it; but certainly the question was not brought under the notice of the Medical Council. He was quite willing to admit that if there were a uniform and satisfactory test, more especially with this Bill, it would be possible to deal with unqualified practitioners in a more stringent manner than they could now be dealt with; and he thought it possible that the best mode of having such a test was for a conjoint scheme. His noble friend when filling the office which he had now the honour to occupy had endeavoured to legislate on the subject, and his experience in 1870 had led him to very candidly acknowledge that the task was no easy one. (Hear, hear.) There were a number of interests which required considerable attention in order that a means of reconciling them one with the other might be found. And it was by no means clear that success in that direction was attainable. In England the difficulty in respect of a conjoint scheme was not so great. The Universities of Oxford and Cambridge did not object to such a scheme. In Ireland, again, as all the medical bodies were more or less centred in Dublin, he did not imagine there would be any great difficulty. In Scotland, however, the case was otherwise. There were the College of Surgeons, the College of Physicians, and the Faculty of Physicians in Edinburgh; the Universities of Edinburgh, Glasgow, Aberdeen, and St. Andrews, all of which would be very much affected by a conjoint scheme. The fact was, so desirous had he been of, if possible, coming to some conclusion which would enable him to legislate on the difficult subject that he had adopted the alternative his noble friend condemned very severely, and made the provision as to a conjoint scheme permissive for the three parts of the United Kingdom; and in order to meet the objection to the provision being only permissive he had raised the qualification of medical practitioners by providing that no person could be placed on the Register of the Medical Council who did not possess two qualifications—one in surgery and the other in medicine. He was quite ready to admit that this was not the best solution of the difficulty, but it was a step in the right direction, supposing that it was not possible to insert in the Bill a compulsory clause for the three parts of the United Kingdom. He was aware of the objections taken to the Bill by the medical bodies to which his noble friend had referred, and he was far from saying that there ought not to be a conjoint board. He thought it would be dishonest of him to say that it would not be an advantage to the country, but it was not always easy to carry out by Act of Parliament what one thought desirable. The clause in the Act referring to the medical examination of women was inserted to cure a technical defect in Mr. Russell Gurney's Act, and would not render it more difficult for women to enter the medical profession except inasmuch as it raised the standard of qualification for registration by requiring a double qualification from all persons who sought to be put on the Register.

The Bill was then read a second time.

HOUSE OF COMMONS.

Friday, April 12th.

THE CASE OF THE REV. MR. DODWELL.

Dr. KENEALY asked the Secretary of State for the Home Department whether he would explain to the House why, after the reports made to him by Dr. Forbes Winslow, in consultation with Dr. Gibson and Dr. Winn, which declared the perfect sanity of the Rev. Mr. Dodwell, now in Newgate for a common assault, he still detained that gentleman in custody as a criminal lunatic, to be confined during her Majesty's pleasure, and whether he would recommend his release without further delay.

Mr. CROSS: I think that the terms of the hon. member's question might lead some hon. members to suppose that I had called for a report from the gentlemen named; but that is certainly very far from being the fact, I merely having received certain letters from them in reference to the case in question. I have this morning received a letter from two of these gentlemen, stating that notice of this question had been placed upon the paper without their sanction and against their wish. In reply to the question of the hon. member, I have to state that it has been found by the verdict of a jury that this unfortunate gentleman committed the act constituting the offence for which he was indicted when insane, and he has therefore, in accordance with the usual practice, been sent to the Criminal Lunatic Asylum at Broadmoor. In accordance with the invariable practice of my predecessors, I shall allow him to remain there until I am advised by the proper authorities that it will be safe to the public and to himself to release him.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentleman has been admitted a Fellow of the College:—

Bäumler, Christian Gottfried Heinrich, M.D. Erlangen, Freiberg, Germany.

The following gentlemen have been admitted Licentiates of the College:—

Bartlett, Felix Paul, Albert-street.
Birt, Ernest, County Asylum, Shrewsbury.
Davis, George, Avenue, Blackheath.
Dumbleton, Edgar Hunt, Commercial-street.
Ellis, William Ashton, Sloane-street.
Gamble, Ernest Langwith Gomperts, Chase, Clapham-common.
Gaze, William Henry, Woodlands, Thames Ditton.
Greenwood, Arthur, Minories.
Greenword, Major, London Hospital.
Henry, Louis, Ampthill-square.
Jover, Anthony, Paris-street.
May, Albert Edward, Clifton-gardens.
Moritz, Siegmund, Cheetham, Manchester.
Nicoll, Thomas Vere, Charterhouse.
Norton, Ritchie Robinson, University College Hospital.
Oram, Richard Rundell William, Great Coram-street.
Packer, William Herbert, County Asylum, Gloster.
Reddy, Herbert Lionel, St. Thomas's Hospital.
Shaw, Charles Thomas Knox, Guilford-place.
Stokes, Richard Lingard, Albert-street.
Vasey, Samuel William, Cavendish-place.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on April 11th:—

Benington, Robert Crewdson, Vivian-road, Peckham-rye.
Bisdee, Alfred James, Hutton, Weston-super-Mare.
Brock, Charles Delisle, St. John's Vicarage, Guernsey.
Bryden, Richard Joseph, Uffculme, Devon.
Burt, Alfred, Ventnor, Isle of Wight.
Cumming, Robert Fredk., St. David's-hill, Exeter.
Drewitt, F. G. Dawtry, Cumberland-street, Eccleston-square.
Wiles, Fredk. William, Wotton-under-edge, Gloucestershire.

COLLEGE OF PHYSICIANS IN IRELAND.—At the April examinations the following obtained the licences in Medicine and Midwifery:—

MEDICINE.—James Chalmers Cameron, William Gruggen, Edward Daniel O'Neill, Alfred Naason Young.
MIDWIFERY.—James Chalmers Cameron, William Gruggen, James Alfred Mansell Moullin, Hubert Foveaux Weiss.

Dr. HATHERLEY, of South Molton, has been placed on the Commission of the Peace for the county of Devon.

ANTI-VACCINATION.—Mr. Charles Washington Nye, a watchmaker, of Chatham, who has undergone six or seven terms of imprisonment in Maidstone Gaol for refusing to have his children vaccinated, and whose case was brought before the House of Commons a short time ago, has been once more taken to Maidstone Gaol to undergo another month's imprisonment for a similar offence, and for refusing to pay the fine imposed. Mr. Nye is secretary to the local Anti-Vaccination Society.

BEQUESTS, &c., to MEDICAL CHARITIES.—Mrs. Catherine Dauntesey Foxton, of Pendlebury, bequeathed £100 to the Manchester Royal Infirmary, £100 to the Barnes Convalescent Home at Cheadle, £500 to St. Mary's Hospital at Manchester, £6000 to establish a dispensary at Blackpool, £6000 to establish a dispensary at Pendlebury provided £4000 is raised from other sources within two years of her death, and £5000 to establish a "Dauntesey Medical" Scholarship and a "Dauntesey Legal" Scholarship, of equal value, at Owens College, Manchester. The Hospital for Sick Children, Great Ormond-street, has become entitled to £200 under the will of Mrs. Elizabeth Benzon, of Kensington Palace-gardens. Miss Maria Casson, of Ealing, bequeathed £100 to the Earlswood Asylum for Idiots, and £50 to the Bolton Infirmary. The Rev. Robert George Baker, of Fulham, bequeathed £250 each to the West London Hospital and St. George's Hospital.

Medical Appointments.

ALLEN, J., M.R.C.S.E., L.S.A.L., has been reappointed a Medical Officer of Health for the Belper Rural Sanitary District, and his salary increased from £100 to £125 per annum.
ARCHER, R. S., M.B., C.M., has been appointed Medical Officer for the Garston District of the West Derby Union, vice Worthington, deceased.
BODDY, H. W., M.B., has been appointed Assistant-Physician to the Clinical Hospital and Dispensary for Children, Manchester.
BOTHWELL, J., L.R.C.S.I., L.A.H.D., has been appointed Medical Officer for the Longbridge-Deverill District of the Warminster Union, Wilts.
BROWN, C. R., M.D., has been appointed Honorary Physician to All Saints Convalescent Hospital, Eastbourne, vice Whitefield, deceased.
BROWN, Dr. J. C., has been reappointed Public Analyst for Lancashire, at £300 per annum, and 6s. for each Certificate of Analysis.
BUCKLEY, S., F.R.C.S.E., has been appointed Assistant-Surgeon to the Clinical Hospital and Dispensary for Children, Manchester.
BUTTERFIELD, H., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Bradford (Yorkshire) Urban Sanitary District for three years.
BYRNE, E. H., L.M. & L.S., has been appointed Resident Medical Superintendent of the Small-pox Infirmary and Convalescent Wards of the South Dublin Union, at Kilmainham.
EDDOWES, W., M.R.C.S.E., has been appointed a Surgeon to the Salop Infirmary, vice Wood, appointed Surgeon Extraordinary.
GAYLOR, E., M.R.C.P.Ed., L.F.P.S.G., has been reappointed a Medical Officer of Health for the Belper Rural Sanitary District, and his salary increased from £100 to £125 per annum.
GREAVES, E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Great Easton District of the Uppingham Union.
HAYDEN, W. G., L.R.C.P.I., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the No. 12 District of the Wycombe Union.
HERON, G. A., M.D., has been appointed an Assistant-Physician to the City of London Hospital for Diseases of the Chest.
KILBRIDE, J., L.R.Q.C.P.I. & L.M., M.R.C.S.E., has been appointed Medical Officer, Public Vaccinator, &c., for the Athy Dispensary District of the Athy Union, co. Kildare, at £130 per annum and fees, and £15 per annum as Medical Officer of Health, vice Mara, deceased.
LITTLE, Dr., Senior Surgeon to the Eye Hospital at Owens College, Manchester, has been elected Lecturer on Ophthalmology, vice Windsor.
LOVELL, Dr. W. D., has been appointed Medical Officer and Public Vaccinator to the Third District of the Bradford Union; also Medical Officer of Health and Certifying Factory Surgeon to the Town of Bradford-on-Avon, vice Oulton, resigned.
LYDDON, R., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Kent and Canterbury Hospital, vice Plumbe, resigned.
LYON, W., M.D., C.M., has been appointed Medical Officer for the Houghton-le-Spring District and the Workhouse of the Houghton-le-Spring Union, vice Tweddell, resigned.
MAUDSLEY, J., M.R.C.S.E., Assistant Medical Officer, Grenada, West Indies, has been appointed Medical Officer of St. John's District, at £300 a year, with private practice.
MILLS, R. J., M.B., C.M., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the No. 8 District of the Norwich Union, vice Turner, appointed to No. 3 District.
NASMYTH, T. G., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Beath, Fifeshire, vice Mungall, deceased.
PEARCE, F. D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Kingsbridge Rural Sanitary District, at £50 for one year.
PEPPER, A. J., M.B., F.R.C.S.E., has been appointed Pathologist and Medical Tutor at St. Mary's Hospital Medical School, vice Duncan, resigned.
RICHMOND, C. E., M.R.C.S.E., L.S.A.L., has been appointed Assistant Medical Officer at the Woolwich Union Infirmary, Plumstead, vice Baker, resigned.
TATTERSALL, L., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Clayton-le-Moors Urban Sanitary District, at £20 per annum for three years.
TENNANT, C., M.R.C.S.E., has been appointed Medical Officer for the Newbottle District of the Houghton-le-Spring Union, vice Tweddell, resigned.
WALKER, R., M.D., has been appointed Medical Officer for the Wooler District of the Glendale Union, Northumberland, vice Brown.
WHITINGTON, C. E., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Laxton District of the Southwell Union, Nottinghamshire.
WILKES, J., F.R.C.S.E., has been appointed an Honorary Commissioner in Lunacy, on resigning as a salaried Commissioner.
WILLIAMS, W. R., M.D., L.K.Q.C.P.I., has been appointed a Commissioner in Lunacy, vice Wilkes, resigned.
WILLIAMSON, R. L., M.B., C.M., L.R.C.S.Ed., has been appointed House-Surgeon to the Dewsbury and District General Infirmary, vice Lennon, resigned.
WOOD, S., F.R.C.S.E., has been appointed a Surgeon Extraordinary to the Salop Infirmary, Shrewsbury, on resigning as Surgeon.
WRIGHT, J. R., M.R.C.S.E., has been appointed Medical Officer for the No. 2 District of the Newmarket Union, vice Faircloth, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BARNES.—On the 7th inst., at Carlisle, the wife of Henry Barnes, M.D., of a son.
MCDOWELL.—On the 13th inst., at the Northumberland County Asylum, Morpeth, the wife of Dr. T. W. McDowell, of a daughter.
ROBERTS.—On the 13th inst., at Hopeton Villa, Upper Lewisham-road, the wife of H. W. Roberts, M.R.C.S.E., of a daughter.
STEWARD.—On the 15th inst., at Newton-heath, Manchester, the wife of Alfred Steward, L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., of a daughter.
WATSON.—On the 5th inst., at Tottenham, the wife of W. T. Watson, M.D., of a daughter.

MARRIAGES.

MCCONAGHY—ROGERS.—On the 10th inst., at Ardsallagh, Robert J. McConaghy, M.D., to Mary, daughter of John Rogers, Esq.
RUSSELL—TOSH.—On the 2nd inst., at St. Andrew's, Burton-upon-Stather, Charles James Russell, M.D., to Louie, daughter of George Tosh, Esq.

DEATHS.

CAMPBELL.—On the 9th inst., at Glenrallach, Argyllshire, Hugh Campbell, L.F.P.S.G., aged 70.
CASS.—On the 12th inst., at St. George's-road, Eccleston-square, William Cass, M.D., aged 67.
CLARKE.—On the 10th inst., at Ballieborough, co. Cavan, Dr. Joseph Clarke, senior.
CURTLER.—On the 6th inst., at Droitwich, Henry Curtler, M.R.C.S.E., aged 41.
DREW.—On the 9th inst., at Salisbury, Walter H. Drew, L.R.C.P.Ed., of Ospringe-road, Tufnell-park, aged 33.
GRIFFITH.—On the 12th inst., at Ventnor, John Clewin Griffith, M.B., aged 45.
MURDOCH.—On the 12th inst., at Bruntsfield-terrace, Edinburgh, William Burn Murdoch, M.D.
O'REILLY.—On the 8th inst., at Bishops Stortford, Michael O'Reilly, M.D., aged 61.
ROPER.—On the 1st inst., at Cambridge, Robert Roper, M.R.C.S.E., aged 54.
SHEA.—On the 16th ult., at Diep River, Cape of Good Hope, Dr. H. D. Shea, Deputy Inspecter-General of Hospitals, aged 66.
STEVENSON.—On the 12th inst., at Nottingham, Frederick Stevenson, M.R.C.S.E., aged 60.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

A SIMULATED STIGMA.

IN the last volume of the Reports of the Vienna Hospital, Dr. Szigmondy relates the case of a young woman who simulated symptoms of the Louise Latour type. She was twenty-two years of age, and strongly built, and an ulcerating scar in the middle of the left hand had resulted from a wound received a year before. It was asserted that every month at the catamenial period the cicatrix opened, and bled for several days. On admission, a superficial ulcer, covered with coagulated blood, lay in the middle of a somewhat larger scar, surrounded by bluish-red staining, which extended over the greater part of the back of the hand. It had the aspect of an old injury, although the patient denied any traumatic influence, and attributed the whole to vicarious menstruation. The hæmorrhage was going on when the patient was admitted, and recurred during an expected menstrual period. Under treatment the ulcer improved slowly, being transformed into a bright red, granulating sore; but in spite of every means employed it would not heal. At the time of menstruation, recent hæmorrhage was found upon the dressings, although no escape of blood could be detected on watching the open surface. The patient was therefore closely watched to see if with a needle or any other means she produced the bleeding, but without detecting any fraud, although the hæmorrhage continued. A plaster-of-Paris bandage was therefore arranged in such a manner as to enclose the whole hand, and effectually to prevent any tampering with the wound. It was so secured by other bandages that any attempt at reaching the ulcer would be immediately detected. The ulcer henceforth rapidly healed, and the hæmorrhage did not recur. This disposes of yet another of the rare cases of vicarious menstruation.

MEMBRANOUS LARYNGITIS OR CROUP AS A RESULT OF A DEFINITE EXPOSURE TO COLD.

To the Editor of THE LANCET.

SIR,—Dr. George Johnson, in his article in your journal of Feb. 16th, under the above heading, opens up a question of great importance—viz., whether the membranous exudations occurring on inflamed mucous membranes or naked cutis are or are not, in the absence of direct contagion, always due to infection by sewage poison conveyed through either air or water. My opinion, founded on numerous cases, coincides with that of Dr. Johnson. In 1874, Dr. Borchardt, of Manchester, described to me many instances of what he called "drain-throat." The cases were so striking that I began making special observations on the subject in a town where the bad drainage afforded many opportunities, and latterly in a more healthy town. I will describe two or three of the more striking instances.

CASE 1.—In 1874 I was called to a woman suffering from enlarged tonsils, on which were patches of membrane. I at once told her she was suffering from "drain-throat," and made an examination of the premises, in which I could discover nothing wrong. This surprised me so much, after the experience derived from former cases, that I made further inquiries, and found that she had had the throat sore for three weeks, and had only been in the town a fortnight. Just in front of the house she had left was a large pool from a dye-works, in which bubbles of gas were constantly rising, and which made the house offensive when the wind blew in that direction. She wrote home to her brother, telling him my opinion, and he had the well examined from which they pumped their drinking-water. A defective drain was found, discharging part of its contents into the well.

CASE 2.—In a house situated on a hill the family frequently complained of sore-throat. The first time I was called in I found a case of sore-throat, which I at once called "drain-throat." I was informed they had no drain in connexion with the house, that the closet was built out from the house, and the cesspool was at the bottom of the hill. I persisted that it was a "drain-throat," nevertheless, and, on further thinking over the matter, they remembered that the patient had been playing in the yard three days before, and had complained of a smell near a syphon-tap. Later, on personal inspection of the premises, I found a leak in the closet soil-pipe running down the outside of the house. Since this has been remedied there has not been a case of sore-throat—i. e., for eighteen months.

Remarks.—Of this drain-poisoning there seems to be the *acute* and the *chronic*. The acute manifests itself especially in sore-throat, barring any specific infection, such as from scarlatina, typhoid, &c.; the chronic, in rheumatism, anæmia, want of energy, and other diseases arising from a low state of the system. Thus in a defectively-drained house a near relative of mine used always to get a sore-throat when she returned to it after being away on a visit for a time (acute poisoning). I paid it a visit when in a low state of health, and got a sore-throat, with patches all over tonsils and pharynx (acute). The lady's brother used to suffer from want of energy and disinclination for any kind of work, though naturally tolerably energetic; their mother had a bad attack of rheumatism, and their father felt his declining energies much restored after the drains were put into better order. These, in my opinion, were cases of chronic poisoning.

I will take up no more of your valuable space by quotation of further cases, but hope that the subject of "drain-throat" may receive a discussion as well as the one described by the heading.

Yours faithfully,

West Hartlepool, March, 1878. R. M. S.

DUBOISIA MYOPOROIDES.

THIS plant, of which an interesting account was given by Dr. Ringer and Mr. Tweedy in our issue for March 2nd, is probably destined to become an important addition to our therapeutic agents. As it closely resembles atropia in its action, the following points of difference between the two alkaloids, as given by Mr. Gerrard, F.C.S., in a paper just published, are worthy of note. The solubility of duboisia in water is twice or more than twice that of atropine. It has more power in neutralising acids than atropine. Its behaviour to sulphuric acid (cold), and also when heated with bichromate of potash, differs from that of atropine. When boiled with baryta, the odour it evolves is entirely different from that given off by atropine under the same conditions. In this connexion we may state that Dr. Bancroft, of Brisbane, who introduced the plant to this country, promises to bring another drug before us shortly—viz., *Pituri*, growing on the borders of Queensland. It is credited with some very remarkable properties.

X. Y. Z.—We are strongly of opinion that the certificate can be demanded.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I beg to submit the following suggestions, through your friendly columns, to the attention of the Committee now investigating the defects of the above department, which, in my humble opinion, would tend to resuscitate it, and keep up a supply of useful public servants:—

1. The abolition of the ten years' system and inviolability of Royal Warrants are assumed as necessary first steps.

2. To do away with age disqualification for active service of executive officers as long as they may be desirous and capable of serving in the regular army.

3. Optional retirement for the above at twenty years' service on not less than 17*s.* 6*d.* a day, but an additional 6*d.* a day for each year of extra service. Twelve months' notice of intending retirement if retirement is not taken at twenty years.

4. Administrative officers to be selected from among the executive officers under twenty-five years' service; to hold the appointment for five years either at home or abroad, or a mixed service between—i. e., if a man has served one year at home, to complete his five years abroad, or *vice versâ*; in fact, to go where and when he is wanted.

5. On completion of this term of duty, to retire on half-pay, but to be appointed for five years to a recruiting centre, with house, forage, and servants' allowances.

6. Promotion to a higher grade on reappointment in the administrative rank to be by selection and by roster for active and inactive service; from the half-pay list up to the age of fifty-five for active service, and sixty-five for inactive—i. e., militia or recruiting—service. To retire permanently at seventy years of age.

7. If an administrative officer, who is not selected for reappointment with the regular army after completion of a five years' recruiting appointment, he can be reappointed for another term of five years to *another* recruiting district, or retire on his half-pay permanently.

8. All recruiting and militia appointments to be undertaken by half-pay army medical officers, with suitable emoluments. The above appointments not to be held after sixty-five years of age.

9. Exchanges between officers allowed on condition that one-half of an officer's service is abroad.

10. Leave not taken one year to accumulate for three years, and then cease.

11. A partial return to the regimental system for terms of duty. Because a man has been administrative officer, it is not considered that he has lost his medical capability, and is incapable of superintending the examination of recruits or other medical duties. On the contrary, he is fully acquainted with the duties required from soldiers, and therefore better capable of selecting men for such purpose. The best administrative officers must be good medical officers, but the best medical officers do not always make the best administrative officers; therefore selection should be the rule.

Should you, Sir, agree in these remarks, I think you will perceive that there will be an equable flow of promotion without waste of material. I think also the twelve years' promotion of surgeons should be cancelled.

I am, Sir, yours faithfully,

April, 1878. OMEGA.

GREEN TEA IN OPIUM POISONING.

PROFESSOR SEWELL, of Quebec, having recommended enemata of green tea in cases of poisoning by opium, and a paper on this subject having lately been read before the Surgical Society of Ireland, Dr. Cameron, city analyst for Dublin, has undertaken to carry out a series of experiments as to the efficacy of the proposed antidote.

QUARANTINE IN SOUTH AUSTRALIAN PORTS.

To the Editor of THE LANCET.

SIR,—I am directed by the Hon. Mr. Boucaut, the Premier of South Australia, to call your attention to a paragraph which appeared in your valuable publication of the 4th August, 1877, page 174, wherein you state: "It is no novel occurrence for emigrant ships arriving at Adelaide to be quarantined for an entire month on account of measles, scarlet fever, &c.; while the arrangements made for the treatment of the sick and the accommodation of the healthy are deplorably and, it may be honestly said, disgracefully deficient."

Now, in the entire history of this colony, only two emigrant ships have been quarantined—viz., the *Taymouth Castle* in 1855, and the *British Enterprise* in 1877. The former had forty-five cases of small-pox on board, and the latter had seven. Every attention that money and skill could provide was shown to the emigrants on each occasion, although inconveniences were doubtless felt by the length of quarantine, in consequence of which a large sum has been recently appropriated for the erection of new quarantine buildings.

I am, Sir, your obedient servant,

W. T. SHEPPARD, Under Treasurer.

The Treasury, Adelaide, South Australia, Feb. 22nd, 1878.

SOMETHING FOR MR. DARWIN.

WE are indebted to the *New York Medical Record* for some notes of a post-mortem examination of a chimpanzee that died of tuberculosis, after having been exhibited for some time in the New York Aquarium. The autopsy took place thirty hours after death, in the presence of many prominent members of the profession. Speaking generally, all the organs strikingly resembled those found in the human subject. The body was found emaciated, the omentum deprived of its fat, the intestines the seat of enteritis, the mesenteric glands tuberculous and enlarged, and the lungs tuberculous. Coming to the brain, all the witnesses were struck with its great similarity to the human brain, this being especially observable in the base of the organ. The cerebrum was richly convoluted, and overlapped the cerebellum to the extent of one-third of an inch. In brief, the outlines, proportions, and dimensions of the brain of the chimpanzee closely resembled those of a new-born human infant. One of the most important human-like features of the brain was the absence of a trapezium, and the presence of the olivary bodies. The island of Reil was also large and well developed. Dr. Spitzka, who conducted the post-mortem examination, is now making the brain and spinal cord of the animal the subjects of careful microscopic study. The chimpanzee was about two years of age when it died, and had been of gentle and docile habits.

M.D.—St. Luke's Hospital, Old-street-road, London.

THE SICKNESS OF PREGNANCY.

To the Editor of THE LANCET.

SIR,—That the method of treatment in the sickness of pregnancy recently recommended by Dr. M. O. Jones, of Chicago, and Dr. J. Marion Sims, is not always so efficacious as it proved in their hands, the following case which has just come under my observation proves; and as the subject is probably now especially interesting to the profession, perhaps you may deem it worthy of insertion in your journal.

Mrs. G——, a strong, muscular, healthy primipara, of eight-and-thirty; six and a half months gone in pregnancy. Has suffered from nausea and sickness more or less during the whole of her pregnancy; and the usual remedies, oxalate of cerium, hydrocyanic acid, bismuth in its various forms, nux vomica, the different aerated waters, champagne, &c., have given but temporary or doubtful relief. Lately she has been much worse, nearly all food being rejected, and she has become thinner and weaker. On Monday, the 11th inst., her symptoms became so urgent, having vomited every particle of food she had taken for the preceding forty-eight hours, I was sent for. On visiting her in the afternoon I was much shocked at her altered appearance. Her countenance was pinched and anxious; eyes sunken; lips livid; her skin generally slightly jaundiced; pulse small, 130; temperature 98° F.; tongue red, raw, and dry; thirst excessive; vomiting and retching continuous, with intense burning pain over the epigastrium, and great general prostration. I felt myself in the presence of a most formidable and urgent case, and at once proposed to her husband and friends the induction of labour as affording the only probable relief to her symptoms. Delay and a trial of the various other remedies I named as sometimes of service were urged, and I accordingly at once applied a large sinapism over the epigastrium, and ordered a pill containing half a grain of calomel and a quarter of a grain of belladonna every four hours; to have iced-milk and lime-water in teaspoonfuls frequently repeated, and to keep sucking and occasionally swallowing small pieces of ice. Desired her to be kept at absolute rest on her back in bed. On visiting her again at 11 P.M. I found little alteration in the symptoms; sickness and thirst still continued, but the pain in the epigastrium was slightly relieved by the mustard plaster and the anodyne pill. Exhaustion being greater, I administered a nutritive enema of cream, Brand's essence of beef, and two teaspoonfuls of brandy, and recommended the previous treatment to be continued during the night. I also ordered a fly-blister, about the size of a small orange, to be applied over the epigastrium.

The next morning there was no improvement. A wretched night had been passed; sickness and vomiting continued during the whole night, and the gnawing, burning pain in the pit of the stomach was as severe as ever. There had been no sleep. Her condition was becoming very alarming, and I asked for a consultation with one of my hospital colleagues. This was at once granted. Further delay, with a continuance of the trial of remedies, was recommended, and I reluctantly acquiesced. Every drop of fluid taken into the stomach being at once rejected, and the pain becoming more distressing, I continued the nutritive enemata, and injected morphia and atropine hypodermically over the stomach, repeating each every eight hours.

March 13th.—No improvement. All the symptoms continuing with unabated severity, and prostration increasing, I resolved to give the application of nitrate of silver to the os and cervix uteri a trial before having recourse to artificial delivery. This I at once practised through a speculum, applying the solid silver freely. The os was reached with some difficulty, being very high and tilted up backwards, and, with the cervix, highly congested, bleeding at once on being touched with the caustic. The fœtal head could be distinctly felt presenting at the brim through the anterior uterine wall. No good whatever resulted from this procedure, and, after waiting twenty-four hours, the condition of my patient had become desperate. Straining and retching had been increasing during the night, dark-brown sanious fluid being now the only rejected matter, and this was pumped up in mouthfuls at short intervals. Emaciation had proceeded most rapidly during the past three days, and the patient now lay in a state of complete collapse. Features sharp and shrunken, with a broad, dark-coloured band under each orbit; extremities cold; fingers and nails blanched and livid; cramp of legs and thighs; teeth covered with sordes, and there was a strong chloroform-like odour from the breath; pulse countless, a mere thread—in fact, with the exception of diarrhœa, she exactly resembled a patient in the collapsed state of cholera. With a slender hope of now saving my patient, I proceeded to the induction of labour. Selecting Dr. Barnes's method, I passed the largest-sized French bulbous bougie (No. 24) through the os between the membranes and the uterus for about seven inches, and coiled the remainder up within the vagina to retain it *in situ*. This provocative measure, instead of having recourse at once to forcible dilatation, I commenced at ten in the morning, hoping that thereby I might even now excite slight uterine action, and perchance, by counter-irritating the stomach, relieve the urgent vomiting; besides it gave me a little time in which to make still further attempts to rally my patient, doubting as I did her ability to bear the shock of rapid delivery. This I could only do by stimulating enemata and hypodermic injections. There was no loss on the day, and the sickness had been decidedly less urgent. By nine in the evening she complained of slight grumbling pains in the lower part of the abdomen, and on examining I found I could pass the tip of my index-finger through the os by the side of the bougie. Withdrawing the bougie, I at once introduced Dr. Barnes's No. 1, or smallest india-rubber dilating bag, and proceeded to fill it slowly with warm water till it was dilated to its full extent. On removing it I found my two fingers now entered the os easily. I then introduced bag No. 2, and subsequently No. 3, proceeding with the dilation in the same slow and gradual manner. At the end of four hours, finding that the fullest amount of dilation to be got from the largest bag had been attained, I ruptured the membranes, and endeavoured to introduce my hand within the uterus. This, from the extreme rigidity of the os, I could not at first accomplish beyond the knuckles; but by gradual rotatory dilatation in about an hour I succeeded, grasped a knee, turned, and delivered. I had some little difficulty with the head, but it ultimately passed without the smallest laceration of the cervix or perineum. The fœtus was dead.

The effect of this interference upon the patient was truly astonishing. From the moment the dilating pressure came to bear upon the cervix, the sickness and retching ceased. Her countenance altered; the dark, ashen colour cleared away, and a faint blush came upon each cheek; her pulse became fuller, and could be counted; her tongue and mouth moister; her eyes, which till then had been turned up, with the eyelids only partially closed, were fully opened, and she took small quantities of milk, lime-water, and brandy by the mouth. She spoke, and said she felt herself returning to life again.

On the third day after delivery there was a good deal of febrile disturbance from the milk, and the temperature went up to 103°; but this was quickly relieved by diaphoretic and aperient salines, and since then her convalescence has been uninterrupted. On the tenth day I allowed her to be taken out of bed and put upon a couch, and on the fourteenth she walked across the room. Solid food was taken on the fourth day, and now she is eating heartily of ordinary diet.

Your obedient servant,

ROBERT MACNAB, M.D., F.R.C.S. Edin.,
Surgeon to the West Suffolk General Hospital.

Bury St. Edmunds, March 30th, 1878.

DESERVING OF A MEDAL.

A BOY about eight years of age, while playing upon the steps at Southwark-bridge on the evening of the 12th inst., overbalanced himself and fell into about twelve feet of water. A man was at the time giving his retriever dog a swim by throwing a stick into the river, and while going after the piece of wood the dog caught sight of the boy struggling. The animal immediately left the wood and swam to the boy, catching him, as he was going down, by the jacket, and brought him safely ashore.

RABIES.

To the Editor of THE LANCET.

SIR,—Having read in the newspapers that several persons had been bitten by a rabid dog at Bagshot, I beg to offer a few remarks of the causes from which rabies originates. It is said that the disease is unknown in Egypt; the climate is warm and dry, and the dogs have their liberty, and rarely suffer from cold. Now, dogs feel the effects of cold most acutely when chained to a kennel, especially in damp weather, and these, I think, are dogs that generally go mad; their secretions and excretions must become deranged, and disease must follow. There is a general impression that dogs do not perspire; but this is fallacy; not copiously it is true. The fact can be easily ascertained. Give a dog a sharp run of a mile or two; then make an examination under his arms and thighs, and perspiration will be very perceptible in damp, hot weather, scarcely visible on dry cold days. Hence dogs are more subject to rabies in cold weather; their safety-valves (the pores) are closed. When a dog is chained to a kennel, he is deprived of a medicine absolutely necessary to his health (dog-grass), and nearly equally so are bones, as they assist in destroying worms, either by trituration, or are formed into dry, hard faeces, which assist in expelling them from the entrails. To keep a dog in health, he must have exercise, grass, and bones, good animal and farinaceous food, and a warm dry house to live in. The most faithful and loving animal in existence, the dog has a strong claim to our gratitude, and if he is not treated honestly we pay the penalty by loss of human life.

I am, Sir, your obedient servant,

April, 1878. R. F.

Mr. J. R. Marsh.—We cannot suggest the course to be pursued. Consult a respectable practitioner.

Student will no doubt obtain all the information he requires by applying to the Secretary of the College.

PERFORATING ULCER OF THE FOOT.

To the Editor of THE LANCET.

SIR,—In reply to Mr. Blomfield, relative to perforating ulcer of the sole of the foot, I would refer him to "The Medical Digest," Section 1785–6, where he will find references to a good deal of valuable information upon the subject. Yours &c.,

RICHARD NEALE, M.D. Lond.

Boundary-road, St. John's-wood, April, 1878.

MALARIAL HÆMATURIA.

THE *New Orleans Medical and Surgical Journal* for February last contains some observations on malarial hæmaturia by Dr. Joseph Jones, the author of the classical medical work reviewed in our columns some two or three years ago. The disease is held to be quite distinct from yellow fever, although possessing many symptoms in common with it. Dr. Jones noticed after death the following changes:—Enlarged slate and bronze coloured liver, with pigment granules; enlarged spleen; gall-bladder distended with thick bile, highly concentrated, and never containing blood. The kidneys present a deep purple, congested hue, and on section exhibit under the microscope the tubuli uriniferi filled with coagulated blood. The vomited matters of malarial hæmaturia always contain bile, thus differing from yellow fever. As regards treatment, Dr. Jones relies on purgation in the first instance, followed by counter-irritation and cupping over the region of the kidneys, and afterwards gives quinine in full doses, to be followed later on by mineral tonics.

Mr. Geo. Lawson.—We hope to publish the paper in the course of two or three weeks. A proof shall be forwarded.

A CASE OF TETANUS; RECOVERY.

To the Editor of THE LANCET.

SIR,—Among the interesting cases of tetanus reported in your issue of Feb. 16th, there is one recorded by Dr. Samuels which has struck me particularly. It has recalled to my mind a case of tetanus treated in the clinical medical ward of the Sir J. J. Hospital, Bombay, in the year 1871, when I was a junior student. The case was strikingly similar to the one reported by Dr. Samuels, but its termination was more fortunate. I give you the facts from memory, which, even at this distance of time, I think, at least in this case, may be relied upon.

The patient was an emaciated, weakly-looking, Cabulese boy, aged about thirteen or fourteen years, and was by profession a mendicant. He was brought to the hospital by the police, with all the symptoms of tetanus of an acute character. Of course there was not the least doubt about the diagnosis, although some difficulty was experienced in making the boy understand the questions put to him, and also in understanding his replies to them, as the language which the boy spoke is not intelligible on this side of India. There was no history of injury, and the case was put down as one of idiopathic tetanus, and treated accordingly. Trismus existed to a considerable extent, and there was a deal of difficulty in swallowing. Nutrient enemata were therefore had recourse to; for, looking to his physical condition, the feeding of the boy was an essential element in his treatment. The paroxysms came on at intervals of about half or three-quarters of an hour, and the decubitus was opisthotonos. Hydrate of chloral, extract of Indian hemp, Calabar bean, and bromide of potassium were all successively exhibited, but only with a palliative result. One day even the whole of his scalp was thoroughly shaved and blistered, but with no better result. Under this treatment the boy began to rally, the paroxysms became less frequent and less acute, and the boy could open his mouth sufficiently to enable him to swallow liquid food. The patient gained flesh, and his complete recovery was entirely a question of time. About this time the annual examinations of the Bombay University had been going on, and the candidates for the medical diploma were brought to this particular ward for their clinical examination. This juvenile patient was allotted to one of the candidates to write a full report upon his case. The candidate, of course, diagnosed the disease; but the examiners bearded him a little on the question whether the case was one of idiopathic or traumatic tetanus. He looked a little puzzled, made another minute examination of the patient's body, and lo! to the surprise of all, a thorn about half an inch long, and of the thickness of a large pin, was found embedded deep in the palm of one of his hands. It was extracted, and from that time the recovery of the patient was very rapid—in fact, in three or four days more he was discharged cured.

This case has a moral: never to depend absolutely on a history either the patient or his friends and relatives give, but to make a careful examination yourself.

I am, Sir, yours &c.,
Sholapore, India, March 9th, 1878. D. G. KAMAT, L.M.

THE SIMON TESTIMONIAL.

IN addition to what was stated last week in our notice of this testimonial, it may be well to inform those who may be interested in the matter that the Committee have decided to present each subscriber of two guineas and upwards with a small copy in plaster of the bust, which has been much admired as an excellent likeness and as a work of art. At the meeting at the rooms of the Social Science Association on the 6th inst. a unanimous vote of thanks was accorded to the artist, Mr. Thomas Woolner, R.A. (not "Woolton," as erroneously printed in the report last week).

QUADRUPLETS.

To the Editor of THE LANCET.

SIR,—I think the following case is, from its rarity, worth recording in your columns.

I was called to attend Mrs. G. F. D—— in the middle of the ninth month of her pregnancy, and found her in labour, the liquor amnii having escaped, and the head being on the perineum. The pains being feeble, I gave ergot, and in ten minutes the child was born, followed at short intervals by three others, the first being born on March 24th at 4, the fourth at 4.20 A.M.; the third was a footling, the others vertex cases. The first and fourth placentæ were distinct, and the second and third firmly united. The fourth, a girl, died on March 26th at 4 A.M.; the second, a boy, died on the same day at 4 P.M.; the first, a girl, and the third, a boy, died on March 27th at 6 A.M. The mother is progressing favourably. She had had one child previously, three years ago.

Yours &c.,
Birmingham, March 30th, 1878. C. HADLEY, M.R.C.S. Eng.

AID TO THE WOUNDED.

A MEETING was held on the 13th inst. at the house of Sir E. Lechmere, M.P., at which many gentlemen connected with the London hospitals were present, to discuss the means of encouraging the ambulance work of the Order of St. John, which is rapidly spreading through the country, by means of hospital organisation in the metropolis. Resolutions were moved and remarks made by the President of the College of Physicians, by Drs. Sieveking, Parquharson, Broadbent, and Howard, by Messrs. Callender, Arthur Norton, and J. Furley, and Sir E. Lechmere, Colonel Gould Weston, and Major F. Duncan, R.A. It was recommended that ambulance committees be formed in the various hospitals to supply the Order with advice, and with instructors for its numerous classes during peace, and to select surgeons, dressers, and nurses for its service in time of accident or war. The Director-General of the Army Medical Department has promised his sympathy and assistance.

Dr. Henry Day, (Stafford.)—We regret the unavoidable delay, but the paper shall appear very shortly.

"THE DANGERS OF BREAD AND CHEESE."

To the Editor of THE LANCET.

SIR,—In your annotation of April 6th I see a very interesting article with the heading, "The Dangers of Bread and Cheese."

In order to prevent if possible the spread of disease, the example of the Swiss would require to be adopted by tradesmen of every class. Would it not be very difficult, however, to prevent customers handling the goods which they intend to purchase? Take the butchers' and fishmongers' stalls, for example, and everyone must have noticed the number of pieces of meat and fish that are handled before the requisite selection is made. It may be said, however, that cooking will destroy any disease germs that may be thus imparted to meat from uncleanly persons. According to some authorities this is not true. Bollinger proved by experiment that cooked tubercle would at any rate produce tuberculosis in the rabbit. Now if this be true with regard to man, how many when purchasing what is looked upon as the "staff of life" are in reality making a contract for the sickle of Death?

Whilst dilating thus on the possible ways by which disease may be spread, there is another which must have occurred to many as well as myself, and which seems to attract little attention—namely, household pets: the cat and dog, for example, among the poor. This thought struck me very forcibly during the recent epidemic of small-pox in Liverpool. On my visit to a patient one morning, who was suffering from a severe attack of variola confluens, I was rather surprised whilst examining him to observe a small dog peering from under the bedclothes at the lower end of the bed, and looking anything but pleasant. There can be little doubt but that disease is spread in this manner to a far greater extent than the public may be inclined to believe. This dog, reeking with contagion, comes in contact with others of its species; these again are fondled by adults and children: hence the "faithful friend of man" may, unknown to himself, belie his title, and become a fertile means of spreading disease.

If contagion may thus be carried by dogs, there is a greater risk of cats spreading disease. Their great love of warmth impels them to seek the bed in many instances to obtain that luxury, and "poor pus" again in her evening rambles may thus be the means of carrying death to many families.

The subject of hygiene is attracting more and more attention every day, and these few remarks may not be unworthy of notice by some of our medical officers of health.

I am, Sir, your obedient servant,
Liverpool, April, 1878. J. WILSON STEELE, M.D.

"LOSS OF NERVE POWER—ITS CURE.—Dr. Watson Bradshaw, of 43, Welbeck-street, author of 'Brain and Stomach,' &c., sees patients each Tuesday and Friday (mornings, 9 till 10; evenings, 7 till 9), at the low fee of 5s. Persons, therefore, of small means can obtain his special advice on loss of nerve power, or general nervous debility, as heretofore."

The above advertisement is cut out of *Lloyd's Weekly Newspaper.* Mr. Watson Bradshaw is a member of the Royal College of Surgeons of England.

THE TREATMENT OF MENINGITIS.

To the Editor of THE LANCET.

SIR,—In answer to "L.R.C.P. Ed.," in your issue of last week, I have had some cases of meningitis in the adult fairly successful, and beg humbly to offer him the following headings, though I am bold enough to say that your correspondent will not again be so unfortunate with the "Tanner method":—A lotion of muriate of ammonia with nitrous ether and dilute acetic acid for the head, constantly and frequently applied; bromide of camphor internally. The patient somewhat raised; his body kept warm, especially the extremities, and a liberal amount of fresh air, and nutritious, non-stimulating diet. No blister (except may be to the calves of the legs), no bloodletting, free purgation, calomel and jalap powder, with senna and salts afterwards. Convalescent stage: iodide of potassium &c. I am, Sir, yours truly,
April, 1878. GAT.

SAYRE'S PLASTER-OF-PARIS BANDAGE.

To the Editor of THE LANCET.

SIR,—My experience of Dr. Sayre's plaster-of-Paris bandage is that it cracks and breaks off in a fine powder around the edges of the jacket, especially about the hips and under the armpits, so that when the patient rises in the morning his bed is full of the white powder. Can any of your readers tell me how to remedy it? Could not something *tougher* be used, such as flannel or felt, and then stiffened by a solution like Hide's patent fluid? I should be glad of suggestions.

I am, Sir, yours truly,
April 10th, 1878. M.D.

MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—As the question of medical reform must shortly occupy the attention of the Legislature, forty years' identification with that subject will, I hope, constitute a claim to be heard in the coming struggle. In former times the arrogance of the Apothecaries' Company was most disquieting to a large number of Scotch and Irish licentiates practising as apothecaries in England. The writer, although the holder of a surgical qualification, underwent several prosecutions at the instance of the Apothecaries' Company for an alleged infringement of the Society's Act of 1815. Allow me now to draw the attention of the Scotch and Irish Corporations to the disjointed state of the law. The Apothecaries Act of 1815 is still unrepealed, and the power of the Society to oppress and prosecute the holders of Scotch and Irish qualifications remains as potent as heretofore, and is only limited by very slender safeguards. The disqualifying effects of the Act of 1815 respecting the recovery of certain *medical* charges in courts of law is a serious blot on former legislation. Nothing short of an Act to supersede that of 1815, or its entire repeal, will meet the wants of a large number of licentiates now practising as apothecaries in England, minus the grand certificate granted at the Blackfriars trading establishment.

The Apothecaries' Company is fully represented at the Medical Council; but no measure of reform can be satisfactory which does not ignore all appeal to the Medical Council for advice. With as much propriety might the Liberation Society consult the bench of Bishops upon the disestablishment of the English Church as for licentiates who are aggrieved by the Act of 1815 to hope for redress from the said Council. As the law now stands, and I have the personal authority of the late law agent of the Society for saying that, if a man held all the diplomas in Europe, and practised as an apothecary in England without having obtained the Society's certificate, on receiving evidence to that effect, legal proceedings might be taken against him for the recovery of a £20 penalty in those cases where medicine had been prescribed and dispensed contrary to the terms of the Apothecaries Act.—Yours &c.,

Bridlington, April 9th, 1878. A. ALLISON, M.D.

Dr. Bennett.—We are obliged, but do not think any good would result from publishing the discussion.

Dr. Weakes.—Very soon. A proof shall be sent.

THE 19th instant being Good Friday, this issue of THE LANCET was printed on Wednesday, and great pressure on our space has compelled us to leave over the report of the Pathological and of several Societies, together with other material, including letters and answers to correspondents.

ERRATUM.—In paragraph 4 of a letter signed "Faithful," on page 551 of our last issue, the negative was by some accident misplaced. The first sentence of that paragraph should read: "That men of the administrative ranks be chosen before twenty-five years' service is reached, for after that age men take *no* interest in the rectification of abuses."

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Curling, London; Mr. C. Macnamara, London; Mr. George Pollock, London; Dr. Burney Yeo, London; Mr. Powell, Hereford; Dr. Duncanson, Edinburgh; Mr. Marsh, Blackburn; Mr. Edgell, London; Mr. Tremerry, Bristol; Dr. Hitchcock, Lewisham; Messrs. Baiss Brothers, London; Mr. Ilderton, Openshaw; Dr. C. R. Brown, Eastbourne; Dr. Murphy, Islington; Dr. Linde, Edinburgh; Dr. Diamond, Muthill; Dr. Cooper, Kennington; Mr. Newman, Bowness; Mr. Whittle, Loughborough; Mr. Hine, Sheffield; Dr. Galbraith, Stirling; Mr. Jessop, Clifton; Mr. Osborne, Sidmouth; Mr. White, Chepstow; Dr. M'Dermott, Silchar, India; Dr. Gell, Kensal-green; Mr. C. Roberts, London; Mr. Tadlock, Knoxville, U.S.A.; Mr. Witherby, London; Mr. Smith, Dumbarton; Messrs. Slatter and Co., London; Mr. Neame, Ramsgate; Messrs. Wright and Co., Birmingham; Dr. D. Duckworth, London; Dr. Giere, Barcelona; Mr. Shute, Greenwich; Mr. Douglas, Woolwich; Dr. Savage, London; Dr. Woakes, London; Mr. Haviland, London; Mr. Coles, Bedford; Dr. M'Intire, Rotherfield; Dr. Brady, Derby; Mr. Wynne; Dr. Gosset, Abingdon; Mr. Puzey; Dr. Russell, Glasgow; Dr. Tatham; Dr. Carpenter, Stockwell; Mr. Johnston, Belper; Dr. Thomas, Sheffield; Dr. Blandford; Mr. Mead; Dr. Biggs, Colchester; Mr. Pearce, Burnham; Mr. Walford; Dr. Marsh, Torquay; Mr. Eddowes, Shrewsbury; Dr. Heron; Dr. Philpot; Dr. Hatherley, South Molton; Dr. Neale, London; Dr. Lucas; Dr. Marsh, Newport; Rev. T. Dowell; Dr. M'Keown, Belfast; Dr. Day, Stafford; Messrs. Evans and Jones; Inquirer, Bradford; Defensor Humani Generis; Observer, Graaff Reinet, Cape Town; X. Y. Z.; Anxious to do Right; F. A. C.; O. C., Chicago; The Registrar-General of Births and Deaths; The Editor of *Brief*; F.R.C.S.E.; Omega; Medicus, &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Hugo, Reading; Dr. Harding, Whittlesea; Mr. Moreton, Northwich; Mr. Gray, Exeter; Dr. Steward, Manchester; Messrs. Oliver and Boyd, Edinburgh; Mr. Cantley, Killinghall; Mrs. Gibson, Halifax; Mr. Marley, Padstow; Messrs. Clarke and Co., York; Mr. Healey, Whitehaven; Mr. Bradburn, Trinidad; Dr. M'Dowell, Morpeth; Mr. Woodcock, Mr. Cutter, Knutsford; Mr. Jules, London; Dr. Logie, Kirkwall; Mr. Curtis; Mr. Mullins; Dr. Plomley, Maidstone; Mr. Glyde, Ipswich; Dr. Tayler; Mr. Banks, Liverpool; Messrs. White and Pike; Mr. Vawdry, Hayle; Dr. Lovell, Bradford; M. B., Oxford; M. D., London; J. W., York; Superintendent; Panama; Alpha, Eastbourne; Medicus, Greenock; B. A. C.; Assistant; A. B. C., Camden-town; Valens; Beta; M. D.; H. M. H.

Church of England Temperance Chronicle, Shield, British Architect, Harrogate Herald, Madras Mail, Isle of Man Times, Colonies and India, Gloucester Journal, &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, APRIL 17TH, 1878.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apr. 12	30·16	E.	46	48	..	62	42	0·12	Hazy
,, 13	30·05	S.E.	48	51	..	63	42	..	Foggy
,, 14	30·04	S.W.	51	54	..	64	47	..	Cloudy
,, 15	30·03	S.W.	51	53	..	62	47	..	Overcast
,, 16	29·84	W.	50	52	..	57	49	..	Raining
,, 17	29·76	W.	50	54	..	..	47	0·16	Cloudy

Medical Diary for the ensuing Week.

Monday, April 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, April 23.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Nettleship, "On a rare form of Primary Opacity of the Cornea."—Mr. Harrison Cripps, "On the Treatment of Hæmorrhage from Punctured Wounds of the Throat and Neck."—Dr. Topham, "On an Abscess within Thorax, accompanied by Pulsation."

Wednesday, April 24.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
HUNTERIAN SOCIETY.—8 P.M. Dr. B. W. Richardson, "On the Practice of Total Abstinence from Alcohol in Health and Disease."

Thursday, April 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Special Meeting.—Mr. Augustus J. Pepper, "On Abnormalities of Fœtal Development."

Friday, April 26.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. J. G. Waller, "On Variation in Spongilla Fluviatilis."

Saturday, April 27.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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